REGIONAL PLANNING AND DEVELOPMENT SERIES

A REVIEW OF AGRICULTURAL TRENDS AND POLICIES

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A REVIEW OF AGRICULTURAL TRENDS AND POLICIES

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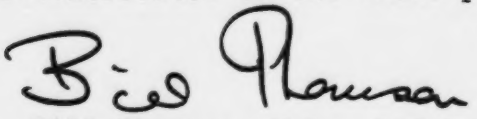
This publication documents the Research and findings related to existing and potential impacts of agricultural development policies within rural areas of The Regional Municipality. It provides a basis for Regional and Area Municipalities to review current Planning and Development Policies in conserving our agricultural resources. This report was also used to prepare Amendment Number Three to The Regional Official Policies Plan which established revised rural land severence policies.

This publication was researched and analysed by Mr. Frank Watty, Senior Planner, with reviews, comments, implications and conclusions contributed by the entire Senior Staff of The Department.

We wish to thank the several individuals and agencies, and particularly, the Waterloo Federation of Agriculture who contributed to the ideas presented here.



Bill Thomson, M.A., M.C.I.P.,
Commissioner
Department of Planning and Development
Regional Municipality of Waterloo

July, 1981

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I. INTRODUCTION

The purpose of this report is to review trends which are occurring within the agricultural sector of the Regional Municipality of Waterloo. In doing so, the report will examine the ways in which these trends are reflected in the use of land within rural areas. The report will assess the effectiveness of existing policies and guidelines in dealing with the problem of farmland preservation and rural non-farm severances. The report will evaluate the capability of the rural landscape for continuing agriculture, and will propose general strategies for implementing and reinforcing local and provincial policies towards agriculture and rural land use planning within Waterloo Region.

Agricultural planning is more than planning for the preservation of high quality farmland on which agriculture does or could occur. Realistically it should extend to all the mechanisms and programs capable of establishing and maintaining agriculture as a viable operation. This includes farm credit, agricultural engineering and research, extension and education, and agricultural marketing to name a few.

Local and Regional Governments have a restricted role to play in agricultural land use planning. Principally, this role is centred around ensuring that as far as possible the best agricultural lands are preserved for farming, and that in defined agricultural districts, disruptions and impediments to farming are held to a minimum.

In recent years several issues have been identified within Southern Ontario which are crucial to the future stability of agriculture. These issues cannot be regarded or analysed individually. They require a comprehensive approach. A few of these issues are listed:

1) An increasing rate of retirement of farmland from active cultivation.

2) Continuing loss of good quality farmland, that is, Class 1, 2, 3 and 4 capability soils and specialty crop lands to non-farm uses.

3) Decreases in the acreage of improved farmland under cultivation.

4) New farmers starting up operations are finding it increasingly difficult due to a combination of rapidly rising agricultural land prices, high capital costs particularly for machinery and stock, and high interest rates.

5) The profits from Ontario agriculture are being eroded by increasing low-priced imports particularly from the United States.

6) Agriculture has tended to become increasingly specialized across the Province. This in turn has given rise to various land management issues such as manure disposal from intensive livestock operations, erosion problems associated with continuous corn cultivation, infiltration of chemicals from fertilizers, herbicide and pesticide applications.

All of the above[1/] occur to varying degrees within the Regional Municipality of Waterloo, and were examined in the course of preparing the Regional Official Policies Plan. In the light of Provincial Government Policies at the time, 1973-1976, and taking into account local area municipality approved or draft policies related to agriculture and rural planning and after consultation with representatives of the major farm federations, a set of policies for agricultural land use planning was incorporated into the Regional Official Policies Plan.

In response to some of these concerns the Government of Ontario through the Food Land Guidelines[2/] has formulated a policy statement for agricultural land management. Simply stated the Guidelines require that "as much as possible of the land with capability for agriculture is kept available for farming when needed". This provincial policy direction is now a requirement in municipal official plans. The method of establishing high priority agricultural lands and for implementing the intent of the policy are stated as:

1) Proper allocation of land among competing uses

2) Designation of areas available for long term agriculture

3) Adequate and appropriate policies for designated agricultural areas.

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1. Report of the Special Committee on Farm Income in Ontario. The Challenge of Abundance. January, 1969.

   ARDA Report Number 7, Planning for Agriculture in Southern Ontario. Centre for Resources Development, University of Guelph. September, 1972.

   C.R. Bryant, Farm-Generated Determinants of Land Use Changes in the Rural-Urban Fringe in Canada, 1961-1975.

2. Ontario Ministry of Agriculture and Food, Foodland Guidelines (1978)

The Regional Official Policies Plan approaches to agricultural planning focus on land allocation and land management policies. The Regional Municipality of Waterloo does not have either the authority or the mechanisms for directly affecting the economic viability of various agricultural operations.

Within this limited mandate the following policy thrusts for the management of Regional Agricultural Land Resources were adopted in the Regional Official Policies Plan.[1/]

1) High priority agricultural areas have been identified and mapped. Class 1 and 2 soils have been designated Agricultural Policy Area 'A' and Class 3 soils as Agricultural Policy Area 'B'. In considering changes in the use of land from agriculture, the Regional Official Policies Plan recommends that lands of lower capability than Class 3 be first considered, thereafter Class 3 (Agricultural Policy Area 'B') lands, and finally Class 1 and 2 lands (Agricultural Policy Area 'A') subject to proof of need. (Chapter 6, Policy 3).

2) Prior to any new expansion of an existing settlement or creation of a new settlement in Settlement Policy Area 'E', being the non-urbanized parts of the Regional Municipality, preservation of Class 1, 2 and 3 agricultural lands be considered. (Chapter 7, Policy 1(5)).

3) Any proposal to increase the size of an existing settlement by more than 30% of the existing number of residential lots or units requires a Policy Plan. (Chapter 7, Policy 16(4)).

   This would include, in part, examination of the trade-offs between urban and agricultural needs.

4) Any proposal to create a new settlement will be evaluated to determine (in part) whether the proposed utilization of the land conforms to the Regional Official Policies Plan. (Chapter 7, Policy 17(3)).

5) Proposals for 1-3 new rural non-farm residential units other than as an expansion to an existing settlement or the creation of a new settlement must conform to the Regional Official Policies Plan. (Chapter 7, Policy 18 1(9)(iii)).

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1. Please refer to the Regional Official Policies Plan for exact wording of these Policies.

6) Within Agricultural Resource Policy Areas (generally Class 1, 2, 3 agricultural soils) priority will be for agricultural use and any legal change in the use of land will be restricted. (Chapter 8, Policy 33).

7) That local area municipality official plans contain agricultural designations based on soil capability. (Chapter 8, Policy 34).

8) New non-agricultural development and expansion or consolidation of new agricultural uses in high priority agricultural areas will be permitted only when deemed to be in the public interest. (Chapter 8, Policy 36).

9) The environmental impacts of intensive livestock operations on adjacent non-farm related dwelling units and vice versa need to be considered in any development applications within the rural areas outside of established settlements. (Chapter 8, Policy 38).

10) Finally, where it is claimed that smaller size parcels are too small to be economically viable for farming, the Regional Official Policies Plan proposes that studies be done to determine how the agricultural potential of the parcel may be preserved. (Chapter 8, Policy 39).

The above policies have been applied informally within the Regional Municipality as the framework for preservation of good farmland and promotion of sound agricultural practices since 1973 and formally since 1976.

Within the four Townships of North Dumfries, Wellesley, Wilmot and Woolwich, draft policies recognize the rural and agricultural nature of these municipalities. All four municipalities support the preservation of high priority agricultural areas and impose severe restrictions on the haphazard development of rural lands for uses not related to agriculture.[1]

The urgent need in agricultural resource planning is for co-operative action by Federal, Provincial, Regional and Local Governments to identify high priority agricultural lands and to encourage and support those engaged in the business of farming. Regional and Local municipalities have until now been limited to the conservation and preservation of good farmland. This is a limited response. Financial and servicing support programs for existing and future farmers are also necessary to make the objectives of preservation more acceptable.

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1. Proposed Official Plan for the Township of North Dumfries Planning Area.
Proposed Official Plan for the Township of Wellesley Planning Area.
Proposed Official Plan for the Township of Wilmot Planning Area.
Draft Official Plan for the Township of Woolwich.

II. REVIEW OF AGRICULTURAL TRENDS, 1966-1976

In 1966 there were an estimated 2,239 census farms[1] in the then Waterloo County and 11,881 persons were living on these farms. By 1971 the number of census farms had fallen to 1976 or by 11.7% and the number of farm residents to 9,487 persons or by 20%. Over this five year period the total area of census farms decreased from 267,460 acres to 249,051 acres or by 6.9%.[2]

During the subsequent five year period 1971-1976,[3] the number of census farms in the Regional Municipality of Waterloo fell to 1862 or by 5.8% from 1971 and the total census farm acreage fell by 2014 acres to 247,037 acres, a drop of 0.8% from 1971.

Changes in acreage of "improved land" on census farms show that over the two time periods 1966-1971 and 1971-1976 the major loss in census farm acreage was not in "improved land", but in land which was "unimproved". In 1966, 84% of the Census Farm acreage was improved land; in 1971 this percentage held constant. However, by 1976 both the actual improved number of acres and the percentage acreage improved of the total had increased over 1971. It has been argued that in the debate on disappearing farmland in Ontario, the crucial issue is not whether total farmland is being depleted but whether good productive acres are being taken out of agriculture. Data for 1966-1971 and 1971-1976 show that acres of improved farmland in Waterloo Region increased by 1.6% between 1971 and 1976, and constituted a larger percentage (86.4%) of total census farm acreage in 1976 than in the two previous years 1966 and 1971.[2]

At the same time, changes in the distribution of farm holdings by size of farm operated underwent a gradual change resulting in an increase in large farm holdings particularly over 240 acres in size. This apparently was due to consolidation and amalgamation of intermediate sized farm parcels especially those between 70 and 240 acres. This category decreased in size from 1473 farms or 65.9% of all farms in 1966 to 1106 or 59.3% of farms in 1976.

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1. In 1966 and 1971, a census farm was defined as an agricultural holding one acre or more in size having sales of agricultural products over the preceding twelve months of $50 or more. In 1976 this definition was revised to include agricultural holdings of 1 acre or more in size having a 1975 sales of agricultural products of $1200 or more.
2. See Tables 1 and 2.
3. Statistics for the year 1976 refer to the 1966 and 1971 Definition of "Census Farm".

TABLE 1

NUMBER AND PERCENTAGE OF CHANGE IN CENSUS FARMS

REGION OF WATERLOO

1966, 1971, 1976

YEAR	CENSUS FARMS	PERCENTAGE CHANGE
1966	2239	-
1971	1976	-11.7
1976	1862	- 5.7

TABLE 2

IMPROVED AGRICULTURAL LAND

PERCENT OF CENSUS FARMS AND PERCENT CHANGE

1966, 1971, 1976

YEAR	IMPROVED LAND	UNIMPROVED LAND	CENSUS FARM AREA	% OF CENSUS FARM	% CHANGE CENSUS FARM AREA
1966	225536	41924	267460	84	
1971	210154	38897	249051	84	-6.9
1976	213558	33479	247037	86	-0.8

TABLE 3

CENSUS FARMS BY SIZE GROUPS,
NUMBER AND PER CENT DISTRIBUTION
1966, 1971, 1976

	1966		1971		1976	
	No.	%	No.	&	No.	%
under 9 acs.	220	9.8	177	9.0	159	8.5
10 - 69	363	16.2	361	18.3	371	19.9
70 - 129	843	37.7	726	36.7	645	34.6
130 - 179	407	18.2	319	16.1	272	14.6
180 - 239	223	10.0	206	10.4	189	10.1
240 - 399	148	6.6	135	6.8	152	8.2
400 - 559	25	1.1	28	1.4	41	2.2
560 - 759	7	0.3	12	0.6	18	1.0
760 - 1119	2	0.1	10	0.5	14	0.8
1120 -1599	1	-	2	0.1	1	0.1
1600+						

TABLE 4

ACREAGE OWNER-OPERATED, TENANTED,
PART-OWNER/PART TENANT OPERATED
1966, 1971, 1976

YEAR	FARM ACREAGE ACS. (%)	OWNER OPERATED ACS. (%)	TENANTED ACS. (%)	PART-OWNER PART-TENANT OPEARATED ACS. (%)
1966	267,460 (100)	226,729 (84.7)	40,731 (15.3)	n.a.
1971	249,051 (100)	141,785 (56.9)	27,424 (11.0)	79,842 (32.1)
1976	247,037 (100)	116,872 (47.3)	22,883 (9.3)	107,282 (43.4)

n.a.: not available

Changes in farm sizes may in part be due to changes in farm ownership and changes in farm operations. These effects may be primarily of an economic or financial nature. For example, farm consolidations may be encouraged by an infusion of investment capital from sources outside of agriculture such as professional people. It is immaterial whether such investments are motivated by speculation or by a genuine investment in agriculture. Alternatively changes in the nature of agricultural activity, for example, a shift from cash farming to livestock will generally require large farm acreages to carry the number of animals raised, as well as to give a reasonable return on the machinery, and other equipment required for an integrated operation.

In 1971, 141,785 acres or 56.9% of total census farm acreage was farmed by the owner, 27,424 acres or 11.0% were tenant operated and 79,842 acres or 32.1% were operated under joint management of owner and tenant.[1] By 1976, the acreage of owner-operated farms had fallen 17.7% to 116,872 acres which was now 47.3% of total farm acreage. Acres rented (to tenants) had similarly fallen by 16.6% to 9.3% of total farm acreage. But acreage under part-owner/part-tenant arrangement had increased 34.4% to comprise 43.4% of the total farm acreage.

In comparison, the number of owner-operated farms decreased 18.7% between 1966 and 1971 as compared with 13.0% between 1971-1976. The number of tenant-operated farms increased 8.7% between 1966 and 1971 but declined in the later 1971-1976 period by 8.0%. Part-tenant/owner operated farms increased in both periods, by 13.0% between 1966 and 1971 and by 22.0% between 1971 and 1976.[2]

Value of capital investment on farms in Waterloo Region (excluding livestock for breeding or production of farm products such as milk) showed major increases in recent years. This was partly due to increasing investment associated with new farm enterprises, enlarged operations resulting from amalgamations and consolidation, larger and more efficient machinery, buildings and equipment, as well as the impact of inflation. Of particlar interest is the fact that value of land and buildings had increased almost three times as fast between 1971-1976 in contrast to the increase between 1966-1971.[3]

The changing age profile for farm operators in Waterloo Region, particularly over the five year period 1971-1976 also highlights some interesting trends. There appears to be an influx of young persons into farming as shown by absolute increases in the under 25 year group, and an increase in the percentage representation of operators under 44 years of age. At the other end of the age scale, over the five year period there was an increase in the percentage of farm operators 60 years and over.

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1. Table 4
2. Table 5
3. Table 6

TABLE 5

NUMBER OF FARMS OWNER OPERATED, TENANTED, PART-OWNER/PART-TENANT OPERATED 1966, 1971, 1976

YEAR	NO. OF FARMS No.	NO. OF OWNER OPERATED FARMS No. (%)	NO. OF TENANT OPERATED FARMS No. (%)	NO. OF FARMS PART OWNED, PART TENANTED No. (%)
1966	2,239	1,730 (77.3%)	172 (7.7%)	337 (15%)
1971	1,976	1,408 (71.2%)	187 (9.5%)	381 (19.3%)
1976	1,862	1.225 (65.8%)	172 (9.2%)	465 (25%)

TABLE 6

FARM CAPITALIZATION 1966, 1971, 1976

	LAND AND BUILDINGS	%	MACHINERY & EQUIPMENT	%	LIVESTOCK & POULTRY	%	TOTAL	%
	$		$		$		$	
1966	93,109,200	70	16,518,700	13	22,902,200	17	132,530,100	10
1971	144,040,700	75	19,075,600	10	27,664,530	15	190,789,800	10
1976	355,255,418	80	40,969,248	9	48,072,526	11	444,297,192	100

Consequently, the percentage of farmers between 45 and 59 years of age has declined. This group has in the past formed the backbone of the farming community.

Agricultural Production

Against this background of declining number of farms and decreasing total farm acreages, the impact of changes in tenure, farm sizes and levels of capital investment is important in determining what has been happening in agricultural production. In Table 7 a comparison of agricultural production levels for selected major products is presented for the two five year periods 1966-1971 and 1971-1976.

Over this study period, the production of cattle, pigs and poultry showed some growth. The period of 1971-1976 indicates a fall-off in hog production due probably to over-production across Ontario and consequent depressed market prices. Numbers of dairy cattle reflected in "the number of cows and heifers milked" have shown a steady decline during this period. However, this decline is more than compensated for by better milk producing stock and thus greater productivity. For instance, in 1971, 14,648 cows were milked the day before the census and produced 533,663 lbs. of milk. On the day before the 1976 census 13,536 cows were milked and produced 522,474 lbs. per cow. In 1971, the average daily milk production was 36 lbs. per cow. In 1976 this figure increased by 8% to 39 lbs.

TABLE 7

REGIONAL MUNICIPALITY OF WATERLOO

CHANGES IN AGRICULTURAL PRODUCTION

1966 - 1976

LIVESTOCK	1966		1971		1976	
	NO.	% CHANGE	NO.	% CHANGE	NO.	% CHANGE
Total Cattle	82384		83124	0.9	97771	17.6
-Cows and Heifers (1 year +)			39854		42309	
-Steers			25755		38178	
-Bulls			935		989	
-Calves (under 1 yr)			16580		16295	
Cows and Heifers Milked	23825		20029	-15.1	18633	-7.0
Pigs	127001		149990	18.1	143627	-4.3
Sheep	2943		1626	-44.8	2039	25.4
Hens and Chickens	1441191		1586492	10.1	1699716	7.1

FIELD CROPS	1966		1971		1976	
	ACS.	% CHANGE	ACS.	% CHANGE	ACS.	% CHANGE
Wheat	8117		4943	-39.1	5786	17.0
Oats	23772		10527	-55.7	5481	-47.9
Barley	5130		6253	21.9	4634	-25.9
Mixed Grains	40725		43264	6.2	38051	-12.1
Corn for Grain	17551		34538	96.8	49966	44.7
Corn for Ensilage	18631		26390	41.6	31194	18.2

In general, farming in Waterloo Region has been gradually transformed from a mixed farming type of agriculture to one specializing in livestock (primarily cattle, hog and poultry) and corn production. This type of operation appears to be typically a vertically integrated operation in which the farmer grows the corn which feeds his animals. Livestock combination farms have shown a phenomenal increase due perhaps to market uncertainty and to lower production costs in relation to land and building overheads.

On the basis of number of farms by product type it would seem that nearly all types of livestock production farms with the exception of livestock combination farms declined in number between 1971 and 1976. However we know from Table 7 that only in the case of "cows and heifers being milked" and pigs were there decreases in production. Consequently we are led to the conclusion that decreasing number of specialist livestock farms has been compensated for by greater production on remaining farms or by livestock combination farms or both.

In the case of field crops only farms producing "small grains excluding wheat" experienced a significant increase in number. However the Region experienced a tremendous increase in corn production. One concludes therefore that expanded acreage in corn cultivation has been widespread across the Region.

While data more recent than 1976 is not available for reference, indications are that the trends identified for the period 1971-1976 are continuing and will likely continue into the 1980's. Consolidation of farm operations and greater specialization of agricultural production in cattle and poultry and in corn production may be expected. The combination of market instability and high costs of investment capital is likely to increase the riskiness of agriculture. At the same time the increasing age of farm operators will likely make more and more farmland available for sale.

TABLE 8

REGIONAL MUNICIPALITY OF WATERLOO

CENSUS FARMS WITH SALES OF $2500. PER YEAR OR MORE CLASSIFIED BY PRODUCT TYPE

1971, 1976

PRODUCT TYPE	1971		1976	
	NO.		NO.	% CHANGE
Dairy	343		310	-9.6
Cattle, Hogs, Sheep (excluding Dairy)	1040		726	-30.2
Poultry	79		72	-8.9
Wheat	-		5	
Small Grains Excluding Wheat	46		156	239.1
Field Crops Excluding Wheat	20		6	-70.0
Fruits and Vegetables	4		9	125.0
Miscellaneous Specialty Products	29		41	41.4
Mixed	39		305	682.0
-Livestock Combination	33		284	
-Field Crop Combination	2		4	
-Other Combination	4		17	

SUMMARY AND CONCLUSIONS

1. In terms of acreage under cultivation, volume and value of agricultural production and level of investment in agriculture, the Regional Municipality of Waterloo continues to have a strong, productive agricultural sector.

2. In response to increasing agricultural productivity, various changes or adjustments are occurring within agriculture. This includes increasing average farm size, increasing farm capitalization and more intensive types of agriculture.

3. These adjustments create further secondary effects through competition for choice farm land, escalation of farm land prices, reduction in number of owner-operated (family) farms, increase in corporate farm ownerships, increase in the incidence of consolidations and amalgamation.

4. We do not have sufficient information on the probable changes in levels of profitability for farm operations. However, given the pressures for expansion of farm operations it is reasonable to suppose that much of the profits from agricultural operations will be ploughed back into farming for expansion, consolidations and modernization.

5. The owner-operated family farm is decreasing in importance as the typical form of farm organization. An increasing number of farm operations are tenant-operated or joint operations between owner and tenants. As a consequence agriculture based on the family farm involving a "way of life" may well be displaced by the corporate farm with its accent on production and profits.

6. This changing pattern in ownership and operation of farms could create severe impacts on the management of the agricultural resources particularly soil and water management, vegetation and the landscape. Simply because tenants and corporate entities may not be as good stewards of the land as owners and family members.

7. While there appears to be continuing interest among young people to enter the business of farming the high costs of entry are making this increasingly difficult. For those who are lucky to enter but who are restricted in the size of holding they can afford, part-time farming offers the only recourse.

8. The increasing trend to specialization is a natural response to the need to maximize returns on capital investment. However, this increases the risk in investment arising particularly from market uncertainties. Market stabilization is perhaps the best guarantee for farmland preservation.

9. The dominance of corn cultivation whether as a cash grain or for ensilage leads to a concern over the ecological impact of this type of specialization. Continuous corn cultivation combined with tenant-operated farming could be ruinous on the environment due to erosion, flooding and pollution.

TABLE 9

ACREAGES OF SOIL CAPABILITY FOR AGRICULTURE

MAP SHEETS	SOIL CLASSES (ACRES)									SOIL CLASSES (PERCENTAGE)							
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Organic (0)	Totals	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Organic (0)
REGIONAL MUNICIPALITY OF WATERLOO																	
Wellesley	24,880	10,370	19,580	5,250	8,580	-	-	940	69,600	35.7	14.9	28.1	7.5	12.3			1.3
Wilmot	20,958	16,568	8,449	7,724	9,805	-	471	895	64,870	32.3	25.5	13.0	11.9	15.1		0.7	1.4
N. Dumfries	5,610	14,520	4,410	5,730	6,400	240	-	6,490	43,400	12.9	33.4	10.1	13.2	14.7	0.5		14.9
Cambridge	2,021	11,060	5,230	410	8,174	-	-	1,465	28,360	7.1	39.0	18.4	1.4	28.8			5.2
Kitchener	2,730	7,270	2,690	5,490	3,980	-	-	600	22,760	12.0	31.9	11.8	24.1	17.5			2.6
Waterloo	3,750	1,380	1,770	1,140	1,310	-	-	510	9,860	38.0	14.0	17.9	11.6	13.3			5.2
Woolwich	27,001	16,457	6,355	8,050	16,062	800	-	5,715	80,440	33.6	20.4	7.9	10.0	20.0	1.0		7.1
Unmapped	-	-	-	-	-	-	-	-	16,710								
TOTALS	86,950	77,625	48,484	33,794	54,311	1,040	471	16,615	336,000	27.2	24.3	14.4	10.6	17.0	0.3	0.1	5.2

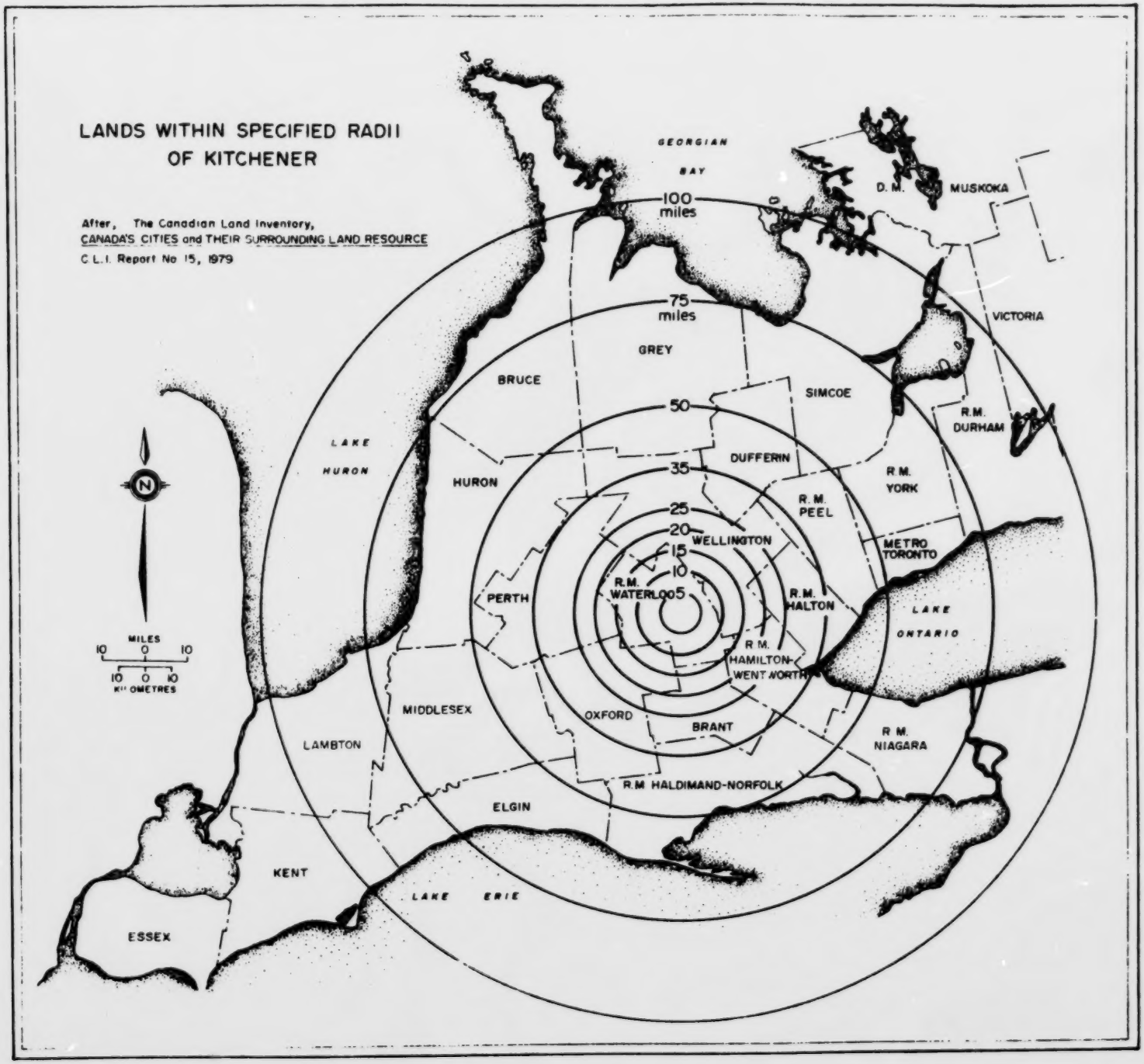
SOURCE: Acreages of Soil Capability Classes
for Agriculture in Ontario
A.R.D.A. Report No. 8
October, 1975

III. REGIONAL AGRICULTURAL RESOURCE

In 1975, the Agricultural and Rural Development Agreement (A.R.D.A.) published an inventory of agricultural land within Ontario by major soil capability classes. The inventory for the Regional Municipality of Waterloo showed that 51.5% of the unbuilt land area was Class 1 and 2 agricultural capability. An additional 14.4% of the land was Class 3, making a total of 65.9% of unbuilt land in Classes 1-3, agricultural capability. The endowment of agricultural land by various class capabilities varied among the individual municipalities within the Region. In Wellesley Township an estimated 78.7% of the land is Class 1 to 3 for agriculture. In Wilmot Township, the corresponding figure is 70.8%. In North Dumfries Township 56.4% of the agricultural land is Class 1, 2 and 3. In the City of Kitchener 55.7% of the agricultural land within the City limits is Class 1-3 (Table 9). Of the remaining land most of the Class 5 agricultural capability soils are flood plain lands. These lands as well as lands having organic soils are unsuited for development. Consequently it appears inevitable that most proposals for urban expansion or new urban development will be at the expense of high quality agricultural land. This is one of the central issues in planning for agriculture within the Regional Municipality.

If the metropolitan sphere of influence for the three cities of Kitchener, Waterloo and Cambridge is considered, and is defined as a twenty-five (25) mile radius centred on downtown Kitchener, then the potential impact of urbanization on the surrounding agricultural resource lands is even further highlighted. (Fig. 1). Tables 10 and 11 show that within this perimeter 368,758 acres or 82% of the agricultural lands is Class 1, 2 and 3 capability for agriculture. The problem of providing land for urban expansion will therefore not be resolved by simply encouraging such growth to occur at greater distances from the major urban centres, yet near enough to be within a reasonable commuting distance.

Within such a context decision-makers need to ask themselves whether the crux of the matter is a straight choice between permitting urban growth at the expense of agriculture, or the preservation of agricultural land at any cost. We suggest that there is a middle ground within which planning and policy-making can move responsibly and yet be responsive to the key questions raised above.


LANDS WITHIN SPECIFIED RADII
OF KITCHENER
After, The Canadian Land Inventory,
CANADA'S CITIES and THEIR SURROUNDING LAND RESOURCE
C.L.I. Report No 15, 1979
GEORGIAN BAY
100 miles
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D.M. MUSKOKA
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R.M. DURHAM
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WELLINGTON
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R.M. HALDIMAND-NORFOLK
ELGIN
KENT
LAKE ERIE
ESSEX
N
MILES
10 0 10
10 0 10
KILOMETRES

TABLE 10

AGRICULTURAL CAPABILITY OF LANDS AROUND KITCHENER

CIRCLE RADIUS Mi. / Km.	AGRICULTURAL LAND CLASS									TOTAL AREA
	1	2	3	4	5	6	7	8	0	
	ACRES									
0-5 0-8	11 678	15 255	7 205	7 942	2 877	0	0	3 455	315	48 727
5-10 8-16	57 336	42 953	19 652	15 150	4 534	0	0	835	6 163	146 623
10-15 16-24	109 466	43 297	54 841	5 723	21 651	1 235	0	3 519	11 857	251 589
15-20 24-32	164 667	55 959	67 701	7 400	21 809	11 114	0	1 171	17 551	347 372
20-25 32-40	198 636	99 679	70 443	11 690	25 655	11 501	0	2 756	26 366	446 726
25-35 40-56	621 899	261 068	165 246	19 462	38 469	23 942	6 856	17 064	44 443	1 198 449
35-50 56-80	1 145 629	490 325	312 924	117 067	84 549	82 621	20 198	46 177	103 742	2 403 232
50-75 80-121	1 402 178	1 050 108	620 047	252 122	287 798	155 926	91 509	133 550	201 885	4 195 123
75-100 121-161	651 829	830 059	345 694	217 408	122 738	116 657	144 580	17 335	148 393	2 594 693

The Canadian Land Inventory
Canada's Cities and their Surrounding
Land Resource
C.L.I. Report No. 15, 1979

TABLE 11

PERCENT DISTRIBUTION OF AGRICULTURAL LANDS AROUND KITCHENER BY SOIL CAPABILITY

	AGRICULTURAL LAND CLASS									
Miles	1	2	3	4	5	6	7	8	0	
0-5	24	31	15	16	6	-	-	7	1	100
5-10	39	29	13	10	3	-	-	2	4	100
10-15	43	17	22	2	9	-	1	1	5	100
15-20	47	16	20	2	6	3	-	1	5	100
20-25	44	22	16	3	6	3	-	-	6	100
25-35	52	22	14	2	3	2	-	1	4	100
35-50	48	20	13	5	3	3	2	2	4	100
50-75	33	25	15	6	7	4	2	3	5	100
75-100	25	32	13	8	5	4	6	1	6	100

The Canada Land Inventory
Canada's Cities and Their Surrounding
Land Resource
C.L.I. Report No. 15, 1979

All seven local area municipalities are committed to the objective of preserving high quality agricultural lands. There are however, several policy mechamisms by which this objective can be accomplished. For example:

1) Preservation of high quality lands now under cultivation in continued cultivation.

2) Encouraging the return of high quality agricultural resource lands not now under cultivation, back into production.

3) Maintenance of lands with high agricultural potential for agricultural production should conditions so require.

4) Discouraging uses which are not essential for agricultural operations from intruding onto high quality agricultural resource lands.

5) Maintenance of agricultural operations in unit sizes which ensure their long term viability.

6) Encouragement of management practices in agricultural resource areas which promote the multiple use of agricultural resource lands for other compatible uses such as reafforestation of poorer sites, controlled recreation activities, to name a few.

7) Provision of support programs and services necessary for establishing farming operations and rural environments as viable economic activities capable of providing an attractive lifestyle.

All of the above issues are relevant to understanding the issue of farmland preservation, and need to be considered in designing appropriate policy. However, various aspects of the problem as outlined above can only be addressed by particular levels of Government. Consequently satisfactory resolution of the farm land preservation issue requires coordination of policy and integration of effort among Federal, Provincial, Regional and Local Municipality decision-makers. Regional and Local Municipality efforts in this regard are primarily involved with the utilization of land within their respective administrative areas. Even these restricted policy areas require substantial support from the Provincial Government in order to be effective.

IV. AGRICULTURAL POLICIES IN THE REGIONAL OFFICIAL POLICIES PLAN

The Regional Official Policies Plan sets out some broad planning guidelines for the allocation and use of high quality agricultural areas. These policies are contained in portions of Chapters 6, 7 and 8. On the basis of the Canada Land Inventory Mapping Program, supplemented by the Waterloo Soils Report from the Ontario Soil Survey,preliminary identification has been made of the location of high quality agricultural soil areas. It is recognized that priority agricultural "districts" should not be confined to a soils identification basis only, and local municipalities are encouraged to consider these and other factors in more detailed policy proposals.

The operative policies in the Regional Official Policies Plan on agriculture are included below:

The Council of the Regional Municipality of Waterloo:

> Will resist the legal change in the use of agricultural land in those areas designated Agricultural Policy Areas A or B as indicated on Map No. 2 in this Plan. Where a legal change in the existing use of land is proposed, preference will first be given to the conversion of poorer agricultural soils, then to those areas designated Agricultural Policy Area B. Strong arguments and proof of being in the public interest must be submittedin Area municipal reports accompanying any Official Plan Amendment or Implementation Plan before Agricultural Policy Area A will be considered for a legal change in use by Regional Council.
>
> Settlement Policy Areas A, B, C and D on Map No. 1 shall have preference subject to the following:
>
> (1) Policies provided in Chapter 13 concerning Environmentally Sensitive Policy Areas.
>
> (2) The extraction of sand and gravel prior to settlement shall be encouraged in accordance with policies of this Plan.
>
> (3) Preference will be given to using Agricultural Policy Areas A or B for non-agricultural uses last, so as to retain the agricultural resource indefinitely or until studies stated as Policy in this Plan indicate proof for the necessity to change.

R.O.P.P. Chapter 6, Policy 3

Policy Area E contains the remaining parts of the Region including existing smaller settlements which may be expanded in the future. The expansion of existing settlements and the creation of new settlements will be considered within the Policy Area. Prior to any expansion of existing settlements or creation of new settlements consideration must be given to the constraints imposed by the location of Class 1, 2 and 3 Agricultural Lands, Sand and Gravel Resources, Flood Plains and Environmentally Sensitive Areas in accordance with policies in this Plan.

R.O.P.P. Chapter 7, Policy 1(5)

The Regional Municipality of Waterloo:

Will support the maintenance and strengthening of rural settlements throughout the Region, when requested by Area Municipal Councils, by providing or aiding in the provision of community services within the jurisdiction of the Regional Council and encouraging the location of social and cultural activities in rural settlements.

R.O.P.P. Chapter 8, Policy 32

Adopts the policy areas shown on Map No. 2 Agricultural Resource Policy Areas, forming part of this Plan, and gives notice that the first priority within these areas is for agricultural pursuits and that any legal changes in the use of land to other uses will be severely restricted, subject to the policies in this Plan and Area Municipal Official Plans. The Agricultural Resource Policy Area A contains mainly Class 1 and 2 agricultural lands being the prime agricultural lands while Policy Area B contains mainly Class 3 agricultural lands as defined on the soils maps of the "Ontario Soil Survey" and "Canada Land Inventory" covering this Region. In considering changes in the legal use of land through amendments to Official Plans and Zoning By-laws, Policy Area B must be considered prior to considering Policy Area A.

R.O.P.P. Chapter 8, Policy 33

Requires that an agricultural classification based on soil capability be placed on all lands outside of Policy Areas A to D on Map No. 1 and other recognized settlements in this Plan and Area Municipal Official Plans, and that this be incorporated into all Area Municipal Official Plans in accordance with Regional and Area Municipal Settlement Pattern policies. For these classifications new agricultural designations can be drafted and included in future Official Plan Amendments and Zoning By-laws.

R.O.P.P. Chapter 8, Policy 34

Will permit new non-agricultural development and expansion or consolidation of existing non-agricultural uses within Policy Areas A and B as shown on Map No. 2 only when such proposals are deemed to be in the public interest. In such cases, detailed study of need, consideration of alternative locations, priority requirements, staging of the development, and public evaluation must accompany any amendment to an Area Municipal Official Plan and/or Zoning By-law for the consideration of Regional Council.

R.O.P.P. Chapter 8, Policy 36

Requires that any new intensive livestock operations or barns shall not be located in close proximity to existing non-farm related dwelling units or to the outer boundary of any Settlement Area existing or proposed in the Regional or Area Official Plans, and that any new non-farm related residential unit or units shall not be located in close proximity to existing intensive livestock operations or barns or buildings. In all instances the separation distance will be determined by the Minimum Distance Separation Formula of the Agricultural Code of Practice for Ontario as prepared and administered by the Ministry of Agriculture and Food, and the Ministry of the Environment for Ontario and that conditions related to the handling of livestock waste meet current regulations of the Ministry of Agriculture and Food.

R.O.P.P. Chapter 8, Policy 37

SUMMARY AND CONCLUSIONS

The Regional Municipality of Waterloo is located within part of the most productive farm land in Ontario. Because of this extensive endowment of productive soil, any urban expansion decision appears to threaten the preservation of good farm land. The challenge to decision-makers within such a context is not simply to halt conversion of future farm land but to prepare a responsible process whereby legitimate and unavoidable conversion can occur while minimizing the resultant adverse effects on the farm environment. This has been the direction set out in the Regional Official Policies Plan.

1) The effect of these policies is to designate high priority agricultural areas within which non-agricultural developments will be strictly controlled, and within which development will be allowed to occur provided special conditions are satisfied.

2) While new settlements may be created, and existing settlements expanded within high priority agricultural areas, the constraints posed by Class 1, 2 and 3 agricultural soils must be considered as part of this process.

3) The plan seeks to preserve and create viable and stable settlement areas within the rural areas complete with adequate social and cultural facilities, as part of the rural land resource management program.

4) Local Municipality Official Plans are expected to continue and refine the policies on conserving good quality farm land, and to include these policies and their appropriate designations in their municipal plans.

5) It is necessary to prove "public interest" before conversion of good farm land can occur.

6) Within the general category of farming or agriculture distinctions can be made between those operations which because of environmental impact such as odour, dust, smells etc., require special locational considerations, and other operations which are relatively inoffensive.

7) The plan recognizes the need to establish acceptable minimum farm sizes or procedures to determine farm viability in the case of rural parcels proposed for development.

V. EFFECTIVENESS OF FARMLAND PRESERVATION POLICIES

In the course of this study a survey of rural land which was lost to urban type development during the three phase time periods 1967-1971, 1972-1976 and post 1976 was conducted. These analysis periods coincide with the Census of Agriculture and provide a good measure of impact in comparison with other variables from the census. The current survey updates a more general study done in 1976 and provides additional insights on the extent of the rural land conversion process. Farmland preservation policies are assessed from two viewpoints. Firstly, one needs to consider to what extent lands potentially available for agriculture have been lost because of development. Secondly, though not as obvious, agricultural lands become reduced in their productive potential if excessive sub-division or fragmentation occurs. In the first instance, a study over time leads to conclusions on whether or not the rate of loss is increasing or decreasing. In the second case, a study over space helps in identifying areas most susceptible to intrusions of non-agricultural uses.

RURAL LAND CONVERSION

The conversion of rural land to urban related uses is a major threat to the continuance and stability of agriculture within the Regional Municipality of Waterloo. There are several facets to this problem. Firstly, there is the actual loss of farmland resulting from the development of land for expansion or creation of settlements. Secondly, residential intrusions into rural areas tend to sterilize adjacent farmland for some agricultural uses due to dust, odour or sanitation impacts. Thirdly, some new urban uses may be of an "open space" nature. however their orientation and primary users may be mainly urban, and for these reasons should be considered urban in nature. Examples of these are gravel extraction areas, golf courses recreational areas and campgrounds. Fourthly, agricultural areas are severely impacted by the construction of major transportation arteries which both take land out of production as well as sever agricultural operations into parcels which could be uneconomical in size to farm.

Notwithstanding, a review of the rate at which conversion of rural land is occurring and a survey of where such conversion is most intensive is useful in determining where the greatest threat to agricultural land is likely to be.

As part of this study an extensive inventory of lands which had been converted to urban uses due to settlement expansion was conducted. For purposes of comparison three time periods have been identified. These are 1967-1971, 1971-1976, and post 1976. It should be noted that for the post-1976 time period we have included development applications which have been draft approved and those which have been registered.

TABLE 12

RURAL LAND CONVERSION THROUGH PLANNED URBAN EXPANSION

ACRES

AGRIC. CAP. CLASS	1967 - 1971					1972 - 1976					POST - 1976				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CAMBRIDGE	---	1503.1	17.2	306.1	96.1	---	564.9	648.3	676.5	8.3	---	558.9	184.7	110.2	31.8
KITCHENER	---	74.6	1575.9	---	---	---	---	1572	---	---	---	176.7	2137.7	---	---
WATERLOO	225.1	780.5	318.4	---	---	316.9	202.2	480.4	---	---	168.8	82.8	916.2	---	---
NORTH DUMFRIES	---	27.2	---	---	---	8.9	47.8	---	---	---	---	59.8	133.5	100.9	---
WELLESLEY	---	6.9	---	---	---	---	58.6	6.1	---	---	---	82.3	51.3	54.7	---
WILMOT	---	51.8	1.3	---	---	15.3	60.8	---	---	---	---	105.4	133.8	---	---
WOOLWICH	95.8	16.6	---	---	---	202.9	3.8	12.8	---	---	91.3	351.0	89.6	---	---
TOTAL	320.9	2460.7	1912.8	306.1	96.1	544	938.1	2719.6	676.5	8.3	260.1	1416.9	3646.8	265.8	31.8
	5096.6					4886.5					5621.4				

Admittedly not all of these have been built upon at this time. However, a sample of field checks shows that in the majority of cases these parcels were not actively cultivated and to all intents and purposes were under the "urban shadow".[1/]

Planned Urban Expansion

Planned Urban Expansion is defined as the orderly expansion of existing settlements or the creation of new settlements by means of subdivision of land. Maps 2 and 3 show the location of all such parcels within the Tri-City area and maps 4 and 5 show locations within the major settlements of the four townships. In addition, smaller scale development has occurred within identified settlements scattered throughout the rural area. These are schematically identified (Map 6).

From Table 12 in 1967-1971, 5096.6 acres of land within the then Waterloo County were approved for Planned Urban Expansion, 40.3% of which was Class 2 agricultural capability and 37.5% was Class 3. Between 1972-1976, 4886.5 acres were converted for urban expansion. However, only 19.2% of this land was Class 2 agricultural soils, though 55.7% was Class 3. In the last time period 5621.4 acres have been draft approved or registered for planned urban expansion. Of this land 25.2% is Class 2 and 64.9% is Class 3 for agriculture. Because the generally high agricultural capability of lands in the Waterloo Region, urban expansion in any direction unavoidably impacts good farmland. However, over the study periods Class 1 soils have not been severely impacted by planned urban development. Most of Class 1 land losses have occurred in the City of Waterloo and the Township of Woolwich. Most of the lands converted in the Region have been Class 3 agricultural capability soils.

In terms of the relative rates of land loss among the seven municipalities, it will be seen from Table 13 that in the 1967-1971 the three urban municipalities accounted for 96.1% of the land converted to urban development. Between 1972 to 1976 this proportion fell to 91.3% and since 1976 there has been a drastic decrease to 77.2%. Increasing rates of urbanization in the Townships by implication also means decreased availability of lands for continued farming.

Special Rural Land Conversion

In addition to planned urban expansion, other types of rural-to-urban developments are occurring in the countryside which are

---

1/ "Urban Shadow" is a concept used to describe lands on the urban fringe which are not fully utilized in anticipation of imminent development for an urban use.

TABLE 13

RELATIVE RATES OF LAND CONVERSION
PLANNED URBAN EXPANSION

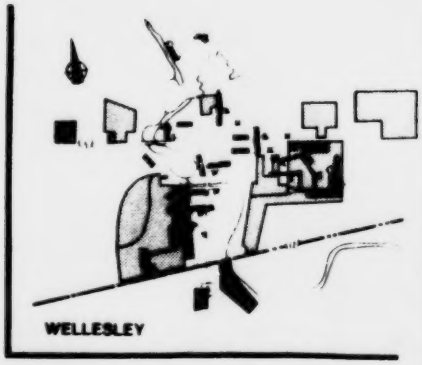
ACRES (%)

	1967 - 1971	1972 - 1976	Post 1976
Cambridge	1922.5 (37.7)	1892 (38.7)	885.6 (15.2)
Kitchener	1650.5 (32.4)	1572 (32.2)	2314.4 (41.2)
Waterloo	1324 (26.0)	999.5 (20.4)	1167.8 (20.8)
North Dumfries	27.2 (0.5)	56.7 (1.2)	294.2 (5.2)
Wellesley	6.9 (0.1)	64.7 (1.3)	188.3 (3.3)
Wilmot	53.1 (1.0)	76.1 (1.6)	239.2 (4.3)
Woolwich	112.4 (2.2)	219.5 (4.5)	531.9 (9.5)
Region	5096.6 (100)	4886.5 (100)	5621.4 (100)

LANDS CONVERTED TO URBAN USE
Major Settlements in the Townships

LEGEND
- 1967 - 1971
- 1971 - 1976
- Post 1976

SCALE 1: 30 000



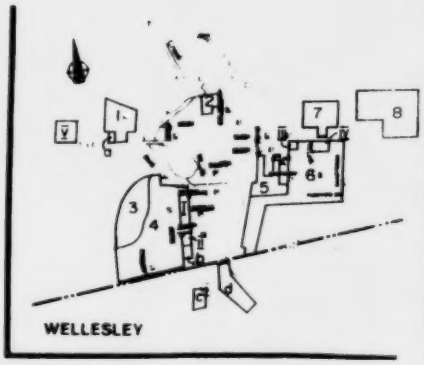
LANDS CONVERTED TO URBAN USE

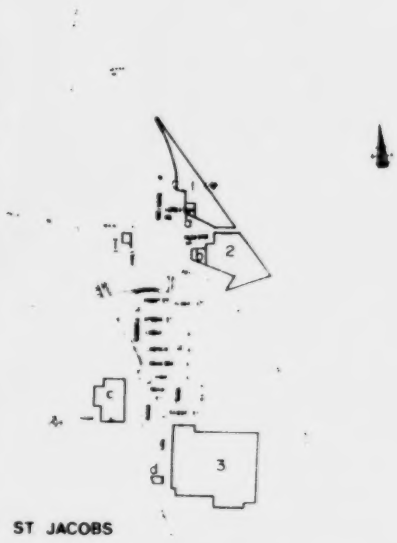
Major Settlements in the Townships

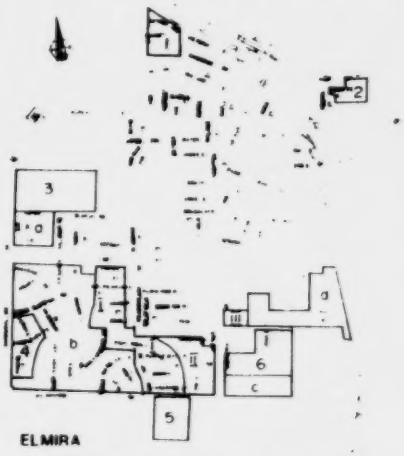
LEGEND

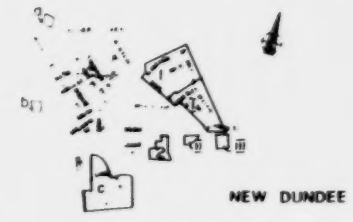
- 1967 - 1971
- 1971 - 1976
- Post 1976

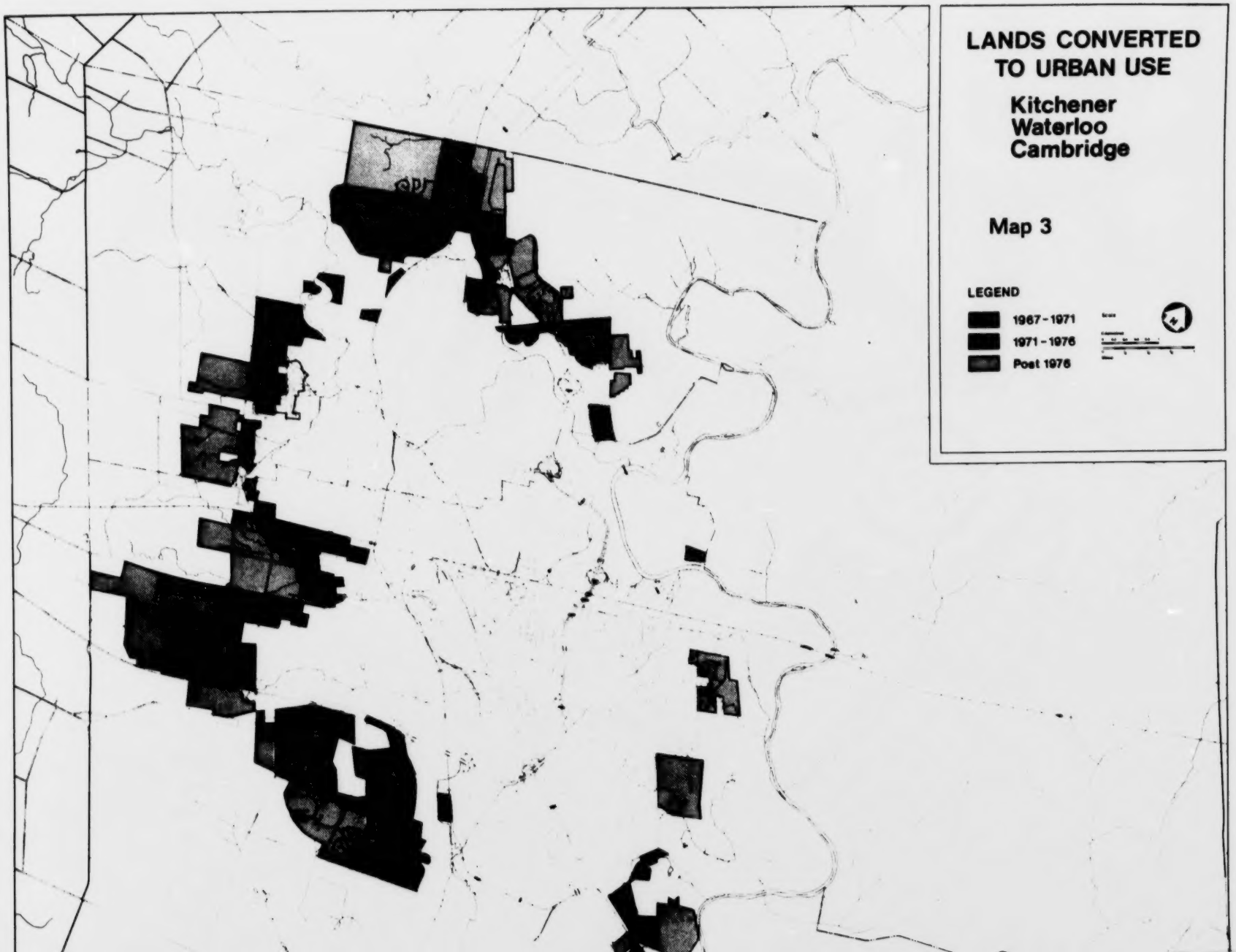
SCALE 1:50 000

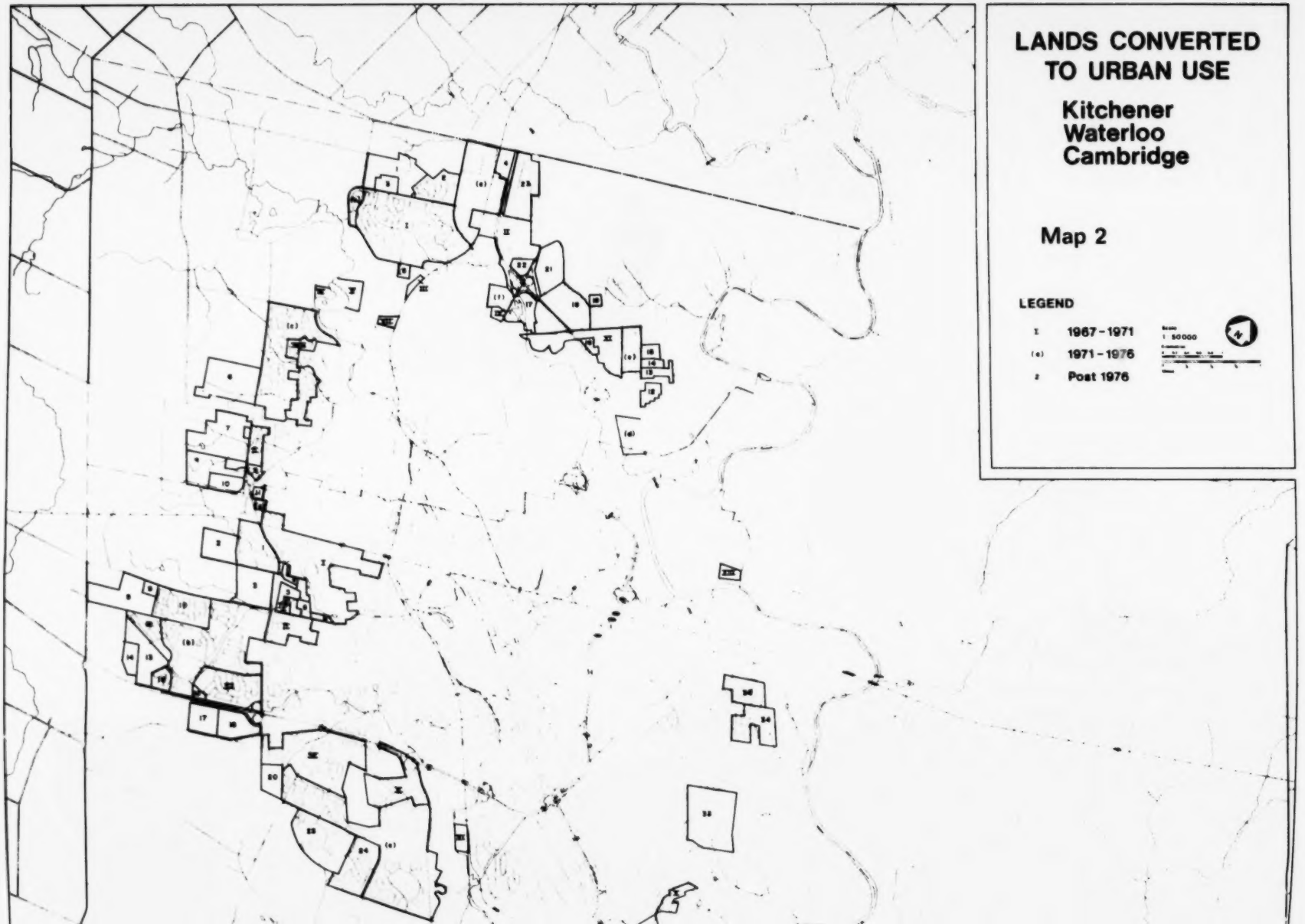


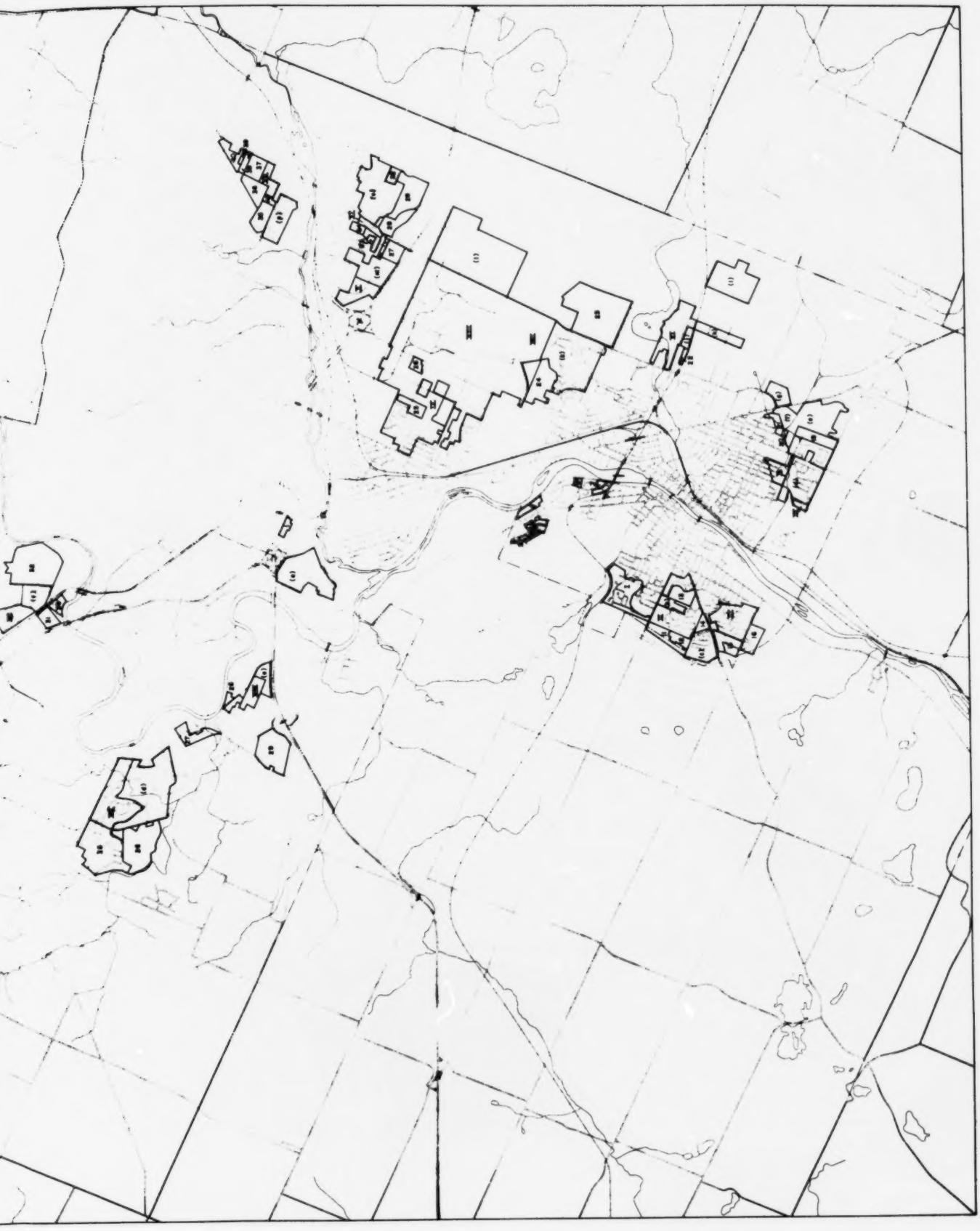







LANDS CONVERTED
TO URBAN USE
Kitchener
Waterloo
Cambridge
Map 3
LEGEND
1967-1971
1971-1976
Post 1976


LANDS CONVERTED
TO URBAN USE
Kitchener
Waterloo
Cambridge
Map 2
LEGEND
1967 - 1971
1971 - 1976
Post 1976



just as significant in the farmland preservation issue. An attempt has been made to document three main types of conversions in this category.

(a) Recreational land conversions which result in site modifications such as golf-courses or require intensive capital investments such as ski-hills or campgrounds are traditionally an irreversible use. There is little chance of these sites reverting to agricultural uses. At the same time though located in a rural setting, and being primarily open space uses few of these uses are rural in nature because they serve primarily urban residents. As shown in Table 14 2257.5 acres of rural land were converted to recreational uses between 1967 and 1976 of which 34% were in North Dumfries Township and 37% were in the City of Waterloo.

No attempt has been made to map the agricultural capabilities of these lands since generally this capability will not have changed because of the change in use. The "loss" of these lands to agriculture is one caused by economic conditons.

(b) Major transportation improvements involving the construction of new highway facilities within the Region has contributed both to the loss of farmland directly and indirectly to disruptions within the agricultural sector.

As shown in Table 15, it is estimated that 838.9 acres were consumed by new major roads between 1970-1978. Of these 54% were in the Township of Wilmot, 23% were in the City of Kitchener and 19.6% in the Township of Woolwich.

(c) Sand and gravel extraction operations are a major source of disruption to agricultural operations. Theoretically, with good management lands can be taken out of cultivation and after the sand and gravel have been extracted, these lands can be rehabilitated for the resumption of agricultural use.

In 1975, there were an estimated 65 sand and gravel pits within Waterloo Region with a total estimated licensed area of 5500 acres. The Township of Woolwich with a licensed acreage of 1615 acres had 29.4% of this area, closely followed by the Township of North Dumfries with 29%. By 1979 the number of licensed pits had increased to 69 or by 6.15% and licensed acreage to 5968 or by 8.5%. It is not possible to indicate given this information, what the net increase in licensed area was during this period, since some licenses may have terminated and new ones issued during the period.

TABLE 14

REGIONAL MUNICIPALITY OF WATERLOO

NUMBER OF SITES[1] AND ACREAGE CONVERTED TO RECREATIONAL USES[2] USES 1967-1976 : BY MUNICIPALITY

	1967 - 1971		1972 - 1975		1967 - 1976	
	No.	Acres	No.	Acres	No.	Acres
NORTH DUMFRIES	4	270	5	500	9	770
WILMOT	1	7.0	2	63	3	70
WOOLWICH	4	260.5	---	---	4	260.5
WELLESLEY	---	---	---	---	---	---
KITCHENER	---	---	---	---	---	---
WATERLOO	1	712	1	±80	2	792
CAMBRIDGE	---	---	1	365	1	365
Region	10	1249.5	9	1008	19	2257.5

1. Sources: Municipal Recreation Inventories
Search of Air Photographs

2. Sites inventoried do not include municipal parks which fall within Table

TABLE 15

REGIONAL MUNICIPALITY OF WATERLOO

AGRICULTURAL ACREAGE CONVERTED
TO NEW MAJOR ROADS

1970-1978

Municipality	Acreage	Year
North Dumfries	---	---
Wilmot	453.53	1970
Woolwich	164.61	1977
Wellesley	---	---
Waterloo	6.62	1978
Kitchener	192.94	1970-1978
Cambridge	21.21	1976-1978
Region	838.91	1970-1978

Source: Department of Engineering
Regional Municipality of Waterloo

TABLE 16

REGIONAL MUNICIPALITY OF WATERLOO
NUMBER AND ACREAGE IN GRAVEL PITS

BY MUNICIPALITY

MUNICIPALITY	Number of Sites		Total Licensed Area		Average Size	
	1975[1]	1979[2]	1975 (Acres)	1979 (Acres)	1975 (Acres)	1979 (Acres)
North Dumfries	17	20	1593	1761	94	88
Wilmot	7	8	534	627	76	78
Woolwich	22	23	1615	1747	73	76
Wellesley	9	9	725	725	81	81
Waterloo	2	1	61	86	30.5	86
Kitchener	5	4	576	535	115	134
Cambridge	3	4	397	487	132	122
Region	65	69	5500	5968	85	95

Sources:
1. Robert McCrae
Sand and Gravel Pits, Regional Municipality of Waterloo
Regional Department of Planning and Development (1975)
2. A.G. McLellan, S.E. Yundt and M.L. Dorfman
Abandoned Pits and Quarries in Ontario
Ontario Ministry of Natural Resources (1979)

LAND SEVERANCES

Land severances may be defined as the division of legal parcels of land for the purpose of creating separate title or as a means to effecting a change in land use. Where the division of the parcel has occurred principally to split the title to the land for reasons of mortgage or conveyancing, there may be minimal impact on agricultural production, except for reducing the future flexibility in management of the parcel.

The incidence of land severances in terms of their number, location, purpose and acreage is also a significant issue in farmland preservation. The reasonsfor granting severances especially for residential purposes have included the following:

Lot for retiring farmer's residence

Lot for farmer's son/daughter residence

Lot for residence for hired help

Other residential non-farm purposes

Creation of parcels for new industrial, commercial institutional, recreational and conservation purposes.

Some severances have been required in order to establish specialized agricultural uses - particularly intensive livestock operations, in agricultural areas. The increase in the number of poultry operations has been related to this trend.

In this review of the impact of land severance policies on rural farmland it has been recognized that during the period of Regional Government in Waterloo Region there have been two sets of policies in use by The Regional Land Division Committee. From 1973-1976, the Interim Land Division policies on severances required:

1. That the proposed use to be created as a result of the Land Division will comply with existing zoning bylaws and/or Official Plans of the Area Municipality.

2. That the proposed use is considered to generally comply with the provisions of Strategy for Growth (1971-1981), but that no land divisions be created in Restricted Use Areas as designated in Strategy for Growth (1971-1981), until a Regional policy for such Restricted Use Areas has been adopted.

3. That the decision creates a registered lot for a farmer who is retiring and wishes to retain the homestead himself and that the remaining lands are to continue in farm use as part of another farm holding.

4. That the decision creates a residential lot for an immediate member of the family of the applicant or a full time farm employee of the subject farm and that one severance per farm for the foregoing purposes will be permitted during 1973 where no previous severance has been granted, or until an Official Policy on the subject has been adopted in the Regional Official Plan.

5. That the proposed land division is in an urban or built-up area of the Area Municipality, it has good road access, water and sewage facilities acceptable to the Regional Engineer and/or the Regional Medical Officer of Health and is considered infilling by the Commissioner of Planning and Development.

Following approval of the Regional Official Policies Plan, a new set of Land Division Policies came into effect; these are contained in Chapter 7, Policy 18(1), 18(2) as follows:

18. CREATION OF LOTS

Where it is proposed to establish a new settlement, new lots are to be created only by registered plan of subdivision except where lots created are to be leased and private internal roads are created.

(1) CREATION OF 1-3 LOTS, RURAL NON-FARM-RELATED RESIDENTIAL UNITS

(a) When it is proposed to create one, two or three lots to establish rural non-farm-related residential units in a location which is not defined as constituting an expansion of an existing settlement or the establishment of new settlement, the following provisions apply:

(i) Rural non-farm-related residential units must be separated from other existing and proposed rural non-farm-related residential buildings by a distance of more than 1,000 feet (304.8 metres), as determined in Policy 15(3);

(ii) Any rural non-farm-related residential unit or units shall be separated from any farm non-residential building housing livestock located on any farm lot by a distance as determined by the Minimum Distance Separation Formula of the Agricultural Code of Practice for Ontario as administered by the Province;

(iii)The proposal must conform to the provisions of the Area Municipal Official Plan and/or Zoning By-law in effect and the Regional Official Policies Plan.

(b) New rural non-farm related uses and lots in a location which do not constitute a new or expanded settlement and are located in Policy Area E of Map Number 1 will not be created where direct access is required to regional, trunk and primary roads as shown on Maps No. 5 and 6 Transportation Policy which form part of this Plan.

(c) The use of consent procedures provided under Planning Act rather than the Plan of Subdivision is encouraged as a means of creating from one to three lots within the defined rural areas of the Regional Municipality.

(d) That there has been no residential lot created by severance from the farm as it existed on January 1, 1973.

(2) CREATION OF LOTS, FARM-RELATED RESIDENTIAL UNITS

(a) When it is proposed to create a farm-related residential lot the following provisions apply:

(i) That there has been no residential lot created by severance from the farm as it existed on January 1, 1973;

(ii) That the proposal must conform to provisions of the Area Municipal Official Plan and Zoning By-law.

(iii) Additional vehicle access is not permitted to trunk and primary roads shown on Maps No. 5 and 6 Transportation Policy from additional new farm-related residential units permitted by Area Municipalities, other than when a new farm is created without an existing farm-related residential unit. Joint use of existing vehicle access to trunk and primary roads shall be permitted for the new farm-related units where an existing farm-related unit is already located on the farm.

Survey of Severances - Townships

A survey of severances within the four Townships has been conducted and it was found that during the 1973-1976 period there were 272 severance applications outside areas zoned for development. Under the rules at that time 160 of these or 59% were approved. Of those approved, 43% were for "retirement lots or for sons/daughters". In the later time period, 1976-1978 an almost equal number of severance applications were submitted (274) of which 176 or 64% were approved by Land Division Committee. However, of those approved, applications for retirement and intra-family transfers now represented a

decreased percentage of all applications approved, ie. 37% as opposed to 43% in the previous time period.

It is further interesting to note that in the 1973-1975 period when residential severances were theoretically easier to obtain, residential severance for other than family members were 17% of the total approved. In 1976-1978, when farm-related loop-holes were tightened non-farm residential severance approvals increased to 23%. The combined representation of residential severances in both time periods was 60% suggesting that the net effect of stronger farm-related policies was erased by non-farm approvals.[1]

There appears to be an increasing trend towards severance applications for agricultural purposes. On the one hand this may be due to attempts at amalgamation or consolidation of parcels particularly for beef and dairy operations. On the other hand, this may be due to demand for smaller sized agricultural land parcels to accomodate such uses as poultry raising, hog rearing or farm-related servicing operations.

Industrial, commercial and institutional severances are shown to have remained at a near constant level. There is a continuing problem of defining industrial or commercial uses "accessory to agriculture" or "supportive of farming" and whether or under what conditions they should be permitted in agricultural areas. This is further discussed later. Until this question is resolved there will continue to be a demand for location of agricultural processing operations, sale and repair of farm machinery and implements, veterinary clinics etc. within agricultural districts.

Notwithstanding the fact that 160 land division applications were approved between 1973-1975, and 176 applications were approved between 1976-1978 the records show that in many cases the deeds pertaining to these approvals have not been registered.[2] This suggests that the action of application for severances may have been a precautionary one only which will be implemented later. In most instances, as shown on Table 14, it is in the "retirement and intra-family use" category and "residential" mainly that deeds have not been issued.

Under the Regional Official Policies Plan, when a residential lot has been created outside of an established settlement, no other residential lot may be created within a distance of 1,000 feet of that lot. Consequently, whether or not severed parcels have been built upon, they have the effect as if there were residential units upon them.

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1. Table 17
2. Table 18

TABLE 17

REGIONAL MUNICIPALITY OF WATERLOO

LAND DIVISION APPLICATIONS/APPROVALS

TOTAL NUMBER OF RURAL SEVERANCES IN TOWNSHIPS

	1973-1975	1976-1978	1973-1978 TOTAL
Number of Applications	272	274	546
Number of Refused Applications	112	98	210
Number of Approved Applications	160 (59%)	176 (64%)	336
Purposes for Applications Approved:			
1. lot for retiring farmer or intra-family use	69 (43%)	65 (37%)	134
2. agricultural uses	31 (19%)	44 (25%)	75
3. industrial, commercial, institutional	29 (18%)	26 (15%)	55
4. residential	27 (17%)	40 (23%)	67
5. other-conservation, openspace, farm mortgage	4 (3%)	1 -	5

TABLE 18

REGIONAL MUNICIPALITY OF WATERLOO

LAND DIVISION APPLICATIONS

(%) - APPROVED SEVERANCES WITH DEEDS GRANTED IN FOUR TOWNSHIPS

	1973-1975	1976-1978	Total
1. Number of Applications Approved	161	176	337
2. Number of Deeds granted	130	139	269
3. Purposes for Applications Granted and with Deeds.			
1. (a) Lot for Retiring Farmer	33 (81.1)	42 (76.9)	75 (79.1)
(b) Other Intra-Family Use	23	8	37
2. Agricultural Uses	26 (89.6)	35 (79.5)	61 (81.3)
3. Industrial, Commercial Institutional	25 (86.2)	24 (92.3)	49 (89.1)
4. Residential	20 (74.0)	29 (72.5)	49 (73.1)
5. Other -Conservation, Openspace, Mortgage	3 (75.0)	1 (100.0)	4 (80.0)

Survey of Severances - Three Cities

There are extensive rural areas within the three urban municipalities of Kitchener, Waterloo and Cambridge. These rural sections of the urban municipalities experience intense pressures for development. Much of these lands are also high quality farmland and though close to the built-up area of the cities, in many instances, they continue in active cultivation. Where such lands are designated for development, policies for agricultural land preservation are not applicable except in regard to keeping the best lands free of development for as long as possible. Areas which lie outside of the designation for settlement are however generally subject to as severe restriction against conversion as if they were in the Townships. Therefore in order to provide a complete picture of trends in land severances within the Regional Municipality as a whole, it is necessary to review what has happened within those areas of the three cities which are not designated for development.

It should be noted that in most instances the limits of settlement designations are clearly identifiable by reference to some natural or physical feature. However, in some cases this determination could not be easily made and some interpretation was necessary in order to decide whether or not a particular severance was outside the settlement designation.

From Table 19 it will be seen that the total number of severances approved within the rural sections of the cities increased from 46 in the period 1973-1975, to 52 in the later period 1976-1978. Most of these were in Kitchener during the former period and in Cambridge during the latter period. Of the approved severances some 78% had received separate deed at the time of survey in 1973-1975 and an identical percentage was found in the 1976-1978 time period. As is to be expected, a consistently high percentage of severances which had been finalized were for residential purposes, almost in all cases more than fifty percent.

The lands immediately adjacent to the built-up areas of the three cities would normally be expected to experience the most intensive development activity. In the majority of cases this would be in the form of planned subdivisions where proper servicing and road access can be provided. The low level of severances may be indicative of success in restricting helter-skelter development within designated areas, successful policies against scattered development outside designated areas, and the fact that most of the candidate lands are held in large blocks in anticipation of development.

TABLE 19

REGIONAL MUNICIPALITY OF WATERLOO

NUMBER OF RURAL SEVERANCES BY TYPE IN THREE CITIES

	KITCHENER		WATERLOO		CAMBRIDGE	
	1973-1975	1976-1978	1973-1975	1976-1978	1973-1975	1976-1978
Number of severances approved	20	13	10	13	16	25
Number of approved severances with deeds granted	16	12	6	10	14	19
Purposes for which severances were approved:						
1. Lot for retiring farmer and intra-family use	---	2 (15%)	1 (10%)	1 (8%)	5 (31%)	6 (24%)
2. Agricultural use	1 (15%)	---	1 (10%)	---	2 (12%)	---
3. Institutional, Commercial, Industrial	10 (50%)	4 (30%)	---	1 (8%)	2 (12%)	1 (4%
4. Residential	8 (40%)	6 (45%)	4 (40%)	10 (77%)	6 (36%)	15 (60%
5. Other	1 (5%)	1 (8%)	4 (40%)	1 (8%)	1 (6%)	3 (12%

Area Impact of Severances

As has been mentioned earlier, the creation of new residential lots within the rural countryside has a negative impact greatly exceeding the area actually withdrawn from agricultural use. Both the direct and indirect effects of severances need to be evaluated as a basis for arriving at new or more effective agricultural land management policies. From Table 20 it will be seen that during 1973-1975 an estimated 651 acres were removed from actual or potential agricultural operations in the four townships through severances. During the period 1976-1978 the corresponding acreage decreased to 317 acres. This represents an improvement in attempts to conserve agricultural land, and it should be noted that this improvement occurred within all four rural Townships.

The average size of severed parcels over the two analysis periods also showed some improvement, declining from an overall average of 11.12 acres during 1973-1975 to 7.9 acres during 1976-1978. Except for Wilmot Township, the average size of a severance for a retiring farmer showed some decreases from 3.27 acres to 2.27 acres. This trend might be an indicator of appropriate sizes of rural farm-related residential severances. Also non-farm related severances showed a decline in average size from 1.5 acres to 1.09 acres.

In the case of the three cities of Kitchener, Waterloo and Cambridge the area impact of severances has not been as severe for several reasons including higher land prices closer to the city and fewer transactions. During 1973-1975 some 292 acres were severed for non-agricultural purposes of which 46% were within Kitchener, 39% in Waterloo and 15% were in Cambridge. By 1976-1978 the acreage affected had fallen to 131 acres 27% of which were in Kitchener, 19% in Waterloo and 53% in Cambridge. In both time periods, non-farm residential severances account for a sizeable proportion of lands so severed.

Bearing in mind the small number of occurrences being surveyed only tentative statements can be made on the average sizes of severances surveyed. Except for retirement lots for farm related persons, the average size of lot has increased for all categories.

In addition to agricultural land which is removed from production because of non-farm related severances, a substantially larger area immediately adjacent to each such intruding use is sterilized for obnoxious farm uses such as intensive livestock operations. Even common agricultural practices such as manure spreading may become offensive to the residents or operators of the new uses on the severed parcels and may be barred from locating or expanding in such locations. A further underlying impact arises from escalation of land values adjacent to the severance. Because such values reflect the new use, the competitive position of agriculture is reduced.

TABLE 20

REGIONAL MUNICIPALITY OF WATERLOO

APPROVED SEVERANCES - ACREAGE

1973 - 1975

FOUR TOWNSHIPS

TYPE OF SEVERANCE	MUNICIPALITY				
	NORTH DUMFRIES	WILMOT	WELLESLEY	WOOLWICH	TOTAL
1. Lot for retiring farmer or other intra-family use	60.45	115.74	22.91	26.75	225.85
2. Agricultural uses	351.3	241.0	157.9	377.95	1128.15
3. Industrial, commercial or institutional	135.72	95.61	36.4	64.61	332.34
4. Residential	22.51	6.01	4.35	8.2	41.07
5. Other-conservation, open space, farm mortgage	.25	5.0	-	46.1	51.35
TOTAL	570.23	463.36	221.56	523.61	1778.76
Estimated Acreage Withdrawn From Agriculture	219.23	222.36	63.66	145.66	650.61

TABLE 21

REGIONAL MUNICIPALITY OF WATERLOO

APPROVED SEVERANCES - ACREAGE

1976 - 1978

FOUR TOWNSHIPS

TYPE OF SEVERANCE	MUNICIPALITY				
	NORTH DUMFRIES	WILMOT	WELLESLEY	WOOLWICH	TOTAL
1. Lot for retiring farmer or other intra-family use	19.06	83.36	24.06	20.98	147.46
2. Agricultural uses	81.4	70.71	722.0	199.75	1073.86
3. Industrial, commercial, or institutional	14.5	29.26	8.4	22.68	74.84
4. Residential	10.16	17.32	12.46	3.6	43.54
5. Other-conservation, open space, farm mortgage	-	51.0	-	-	51.0
TOTAL	125.12	251.65	766.92	247.01	1390.7
Estimated Acreage Withdrawn From Agriculture	43.7	180.9	44.9	47.3	316.8

TABLE 22

REGIONAL MUNICIPALITY OF WATERLOO

APPROVED SEVERANCES - ACREAGE (AVERAGE SIZE)

1973 - 1975

FOUR TOWNSHIPS

TYPE OF SEVERANCE	MUNICIPALITY				
	NORTH DUMFRIES	WILMOT	WELLESLEY	WOOLWICH	TOTAL
1. Lot for retiring farmer or other intra-family use	4.65	3.62	1.76	2.43	3.27
2. Agricultural uses	39.03	48.20	39.48	29.07	36.39
3. Industrial, commercial, or institutional	12.34	23.9	12.13	5.87	11.46
4. Residential	2.81	.75	.62	2.05	1.5
5. Other-conservation, open space, farm mortgage	.25	5.0	-	23.05	12.84
TOTAL	13.58	9.27	8.21	12.77	11.12

TABLE 23

REGIONAL MUNICIPALITY OF WATERLOO

APPROVED SEVERANCES - ACREAGE (AVERAGE SIZE)

1976 - 1978

FOUR TOWNSHIPS

TYPE OF SEVERANCE	MUNICIPALITY				
	NORTH DUMFRIES	WILMOT	WELLESLEY	WOOLWICH	TOTAL
1. Lot for retiring farmer or other intra-family use	1.73	3.79	1.60	1.23	2.27
2. Agricultural uses	16.28	6.43	48.13	15.36	24.4
3. Industrial, commercial, or institutional	4.83	5.85	1.05	2.27	2.88
4. Residential	1.02	1.15	1.38	0.6	1.09
5. Other-conservation, open space, farm mortgage	-	51.0	-	-	51.0
TOTAL	4.31	4.66	16.32	5.37	7.9

TABLE 24

REGIONAL MUNICIPALITY OF WATERLOO

ACREAGE OF APPROVED SEVERANCES - THREE CITIES

1973 - 1978

	KITCHENER		WATERLOO		CAMBRIDGE		TOTAL	
	1973-1975	1976-1978	1973-1975	1976-1978	1973-1975	1976-1978	1973-1975	1976-1978
1. Lot for retiring farmer or other intra-family use	---	2.83	1.0	0.723	5.484	12.169	6.484	15.722
2. Agricultural uses	31.18	---	21.41	---	148.54	---	201.13	---
3. Industrial, Commercial Institutional	23.69	10.62	---	1.0	21.82	3.5	45.51	15.12
4. Residential	108.30	18.75	7.34	20.56	14.95	41.859	130.55	81.17
5. Other	3.11	3.96	106.39	3.19	1.0	12.145	110.5	19.29
	166.28	36.17	136.14	25.48	191.794	69.673	494.174	131.302
Estimated severed acreages withdrawn from agriculture	135.1	36.17	114.73	25.48	43.254	69.673	293.044	131.302

TABLE 25

REGIONAL MUNICIPALITY OF WATERLOO

AVERAGE SIZE OF SEVERED PARCEL BY TYPE - THREE CITIES

1973 - 1978

	KITCHENER		WATERLOO		CAMBRIDGE		TOTAL	
	1973-1975	1976-1978	1973-1975	1976-1978	1973-1975	1976-1978	1973-1975	1976-1978
1. Lot for retiring farmer or intra-family use	---	1.415	1.0	0.723	1.097	2.03	1.08	1.75
2. Agricultural uses	31.18	---	21.408	---	74.27	---	50.28	---
3. Industrial, Commercial Institutional	2.369	2.656	---	1.0	10.91	3.5	3.79	2.52
4. Residential	13.538	3.126	1.836	2.056	2.491	2.7906	7.25	2.62
5. Other	3.11	3.964	26.6	3.186	1.0	4.05	18.42	3.86
							10.74	2.57

Revised Regional Severance Policies

The Regional Municipality of Waterloo has recently given approval to an amendment to the Regional Official Policies Plan for the revision of its severance policies. This amendment concludes a lengthy process of public discussions on the need for more restrictive severance policies and the manner in which these policies might be implemented. In summary the amendment creates new criteria for considering for identifying "farms" and thereby applications for "farm related residential units". The amendment also alters the criteria for considering requests for severances for new non-farm residential uses in rural areas and provides for the establishment of additional residential units on farms without severances.

The details of the revised rural severance policies are indicated in the following extracts from the amendment.

1) Policy 14 RURAL SETTLEMENT is to be amended to read as follows:

RURAL SETTLEMENT

14. The controls for development within Policy Area E, shown on Map No. 1 are contained in Policies 15, 17, 18 and 19. The controls are intended to provide for orderly development in these areas and to prevent haphazard non-farm related settlement along public roads (often referred to as strip development). It is intended that their inclusion in this Plan will assist Area Municipalities in preparing their own Official Plans and Zoning Bylaws.

2) Policies 15(1) and (2) are to be amended to read as follows:

15. In this Policy:

(1) FARM-RELATED RESIDENTIAL UNIT is defined as:
A dwelling unit used as the primary residence for an active and operating farmer, and

A dwelling unit for a full-time farm employee of an active farm on which the dwelling is located

(2) "RURAL NON-FARM RELATED RESIDENTIAL UNIT is defined as: Any dwelling unit which does not conform to the above definition of farm-related residential unit".

3) A new policy 15(4) is to be added, to read as follows:

(4) A FARM is defined as a parcel of land on which the predominant activity is farming.

4) A new policy 15(5) is to be added, to read as follows:

(5) FARMING is defined to include tillage of soils; the breeding, raising or maintaining of livestock horses, or poultry; fur farming; dairy farming; fruit growing; the keeping of bees; fish farming; vegetable growing and Christmas tree growing. Sod farming may be included if permitted in the Area Municipal Official Plans, subject to a specific zone change.

5) A new policy 15(6) is to be added to read as follows:

(6) FARMER is defined to be an individual family, association or corporation engaged in farming.

6) A new policy 18(1)(e) is to be added to read as follows:

(e) The proposed lot, where located within Agricultural Resource Policy Areas A and B shall not include a majority of Class 1, 2 or 3 agricultural land as defined by the Ontario Soil Survey and the Canada Land Inventory or as may be further determined by site inspection by a competent soils expert.

7) A new policy 18(1)(f) is to be added to read as follows:

(f) Proposed new rural non-farm related residential units shall not be permitted within any woodlot (as defined in the Forest Resource section of the Economic Policy, Chapter 8) unless they conform to Area Municipal Environmental and Tree Cutting Policies.

8) A new policy 18(1)(g) is to be added to read as follows:

(g) Where a parcel of land is to be used for a rural non-farm related residential use it may be up to a maximum size of 1.2 hectares (3 acres). Any parcel to be created for rural non-farm residential use in excess of 1.2 hectares may only be created by amendment to the Area Municipal Official Plan and specific Zone Change.

9) A new policy 18(1)(h) is to be added to read as follows:

(h) Notwithstanding Policy 19(2), where two or more existing farms are merged in title into one ownership, policies related specifically to the surplus farm-related residential unit and any ancillary farm building will be included in the Area Municipal Official Plan and such surplus units may be severed subject to an amendment to the Zoning Bylaw which will specify the maximum permitted lot size.

10) Policy 18(2) CREATION OF LOTS, FARM-RELATED RESIDENTIAL UNITS is to be deleted in its entirety, and in its place, a new Policy 18(2) CREATION OF FARMS is to be added to read as follows:

2. CREATION OF FARMS

(a) When it is proposed to create a new farm the following provisions shall apply:

(i) That when a farm is to be created by severance or when part of an existing farm is being severed and merged in title with an adjoining farm, the farm being created must contain a minimum of 35 hectares and be in accordance with Section 15(5) of this Plan. The parcel of land being retained and from which the severance was taken must continue to have a minimum of 35 hectares.

(ii) Notwithstanding Policy 2(a)(i), where an intensive farming operation is proposed or where a farm of less than 35 hectares is proposed the farm size may be reduced by the Area Municipal Council through the use of a site specific Zoning Bylaw Amendment and subject to all other policies in this Plan.

(iii) When a new farm is created by severance, a new vehicle access may be permitted to a trunk or primary road as shown on Maps No. 5 and 6, Transportation Policy, particularly where joint access with an already existing vehicle access point is not proven feasible, according to accepted transportation planning practices and all other policies in this Plan.

11) Policy 19(1) is to be deleted, and existing Policy 19(2) is to be renumbered Policy 19(1).

12) Existing Policy 19(3) is to be renumbered Policy 19(2) and is to be amended as follows:

(2) To aid retiring farmers, and to accommodate full-time farm employees including members of the farm family who are employed on the farm, the creation of a second or third residential unit without the use of a severance may be permitted.

A second or third residential unit attached to or forming a part of the existing dwelling unit may be permitted. In all other cases an amendment to the

Zoning Bylaw shall be required. All approvals for a second or third residential unit shall be subject to all other policies of this Plan and those of Area Municipal Official Plans. Assistance for such units should be encouraged by the Provincial Ministries of Housing and Agriculture and Food and the Farm Credit Corporation through their funding programs.

13) Existing Policy 19(4) is to be renumbered Policy 19(3) and amended as follows:

(3) In the event that a second residential unit has been established without a severance or a residential lot has been created by a severance from a farm as it existed on January 1, 1973, no additional residential lot or residential unit will be permitted by severance.

14) Existing Policy 19(5) is to be renumbered Policy 19(4) and amended as follows:

(4) New non-residential uses which are not farm-related will be encouraged to locate within or adjacent to Settlements. Strictly farm related non-residential uses will be permitted other than in Settlements but must be in conformity with policies in the Area Municipal Official Plans and all policies in this Plan including priorities of the use of land, access and public services.

The above amendments attempt to curtail the eligibility of landowners for farm-related residential severances and complement the already existing strong policies limiting non-farm related severances. In summary non-farm related residential severances will be guided by the following requirements Policy 18(1)(a)-(d).

3. When it is proposed to create one, two or three lots to establish rural non-farm related residential units in a location which is not defined as constituting an expansion of an existing settlement or establishment of a new settlement, the following provisions apply:

(a) A minimum separation distance of 304.8 metres between any existing and proposed non-farm related residential building.

(b) Recourse to the Minimum Distance Formula of The Agricultural Code of Practice to determine desirable distance separation between any rural non-farm related residential unit or units and any non-residential farm building housing livestock located on any farm lot.

(c) Conformity to the Area Municipal Official Plan and/or Zoning Bylaw in effect, and the Regional Official Policies Plan.

(d) New rural non-farm related uses and lots which do not constitute a new or expanded settlement and are located in Policy Area E of Map No. 1 will not be created where direct access is required to Regional, Trunk and Primary Roads.

(e) The use of consent procedures provided under The Planning Act rather than the Plan of Subdivision is encouraged as a means of creating one to three lots within the defined rural areas of the Regional Municipality.

(f) No residential lot has been created by severance from the farm as it existed on January 1, 1973.

At the time of writing, the afore-mentioned Amendment to the Regional Official Policies Plan had not received approval by The Minister of Housing. Comments of circulated agencies now under discussion suggest that some revision to this Amendment may be required.

It will be noted that no special provisions will be made for the creation of lots for retiring farmers under the farm-related residential criteria. All applications previously falling under this provision will now be expected to meet all the regulations for the creation of a rural non-farm related lot and/or residential unit. Similarly, with a more precise designation of a farm, rural parcels meeting this criterion may now qualify for a residential unit subject to the conditions previously discussed.

Establishment of a specific size qualification for general farms and another for intensive farms may be initially questioned. Indeed any size recommendation would be subject to some query. Without attempting to defend the limits indicated, the rationale for two sets of farm types is clear. It partly reflects current trends occurring in the Region. It could form the basis for a more relevant agricultural zoning.

Provisions have been made for Area Municipal Councils to extend the farm size definition for general farms to parcels less than 36.5 hectares in size on a case-by-case basis subject to a site specific zoning by-law amendment. Such a modification must be in conformity with other policies in the Regional Official Policies Plan.

The eventual success of these policies will depend on how consistent and sensitive both Area and Regional Councils are in applying them. The wide support which these policies have received among the farming community is evidence that the current trends in severances is perceived

as a serious threat to agricultural land stability, deserving strong corrective action. Prohibition of farm-related severances will not necessarily be a hardship on genuine farmers since second or third houses on the farm without severances is permissible, and so also are manufactured (mobile) homes. Limited growth within the planned setting of rural service towns and hamlets also offers a reasonable alternative.

SUMMARY:

1. Available statistics show that in rural as well as in urban municipalities there has been a steady loss of rural land due to urban expansion and urban-related developments.

2. Because of the extremely high proportion of good quality farmland adjacent to most settlement areas in the Regional Municipality, development has tended to occur at the expense of good quality farmland.

3. The amount of land converted for planned urban expansion has not declined appreciably and based on the number of draft approved and registered plans since 1976, there is a major surplus of development land within the Regional Municipality.

4. Though there has been no distinction made amont the various uses of development land (ie.) residential versus industrial, for example, it is apparent that there has been an excessive amount of development approvals particularly since 1976 in all municipalities and particularly in Kitchener, Waterloo and Woolwich.

5. The number of severances approved in the rural townships have not declined since 1973 though there has been a reduction in the acreage involved particularly for retirement lots. Discounting severances for agricultural purposes there has been a significant drop in acreages withdrawn from agriculture between 1973-1975 and 1976-1978. Overall the average size of each severance has dropped by almost 30%.

6. In the three urban municipalities the number of severances within the rural sections has increased slightly, with most of these approvals concentrated in the "residential" category. Similarly, most of the acreages involved have been for residential uses. In the Cities also the average size per severance dropped sharply from 1973-1975 to 1976-1978.

VI. FARM FRAGMENTATION

Farm fragmentation is the result of land division of original farm parcels into smaller separated holdings under individual deeds. It is a process carried through over time and may reflect social, economic and development processes affecting the area. As discussed in the Food Land Guidelines, the process of farm fragmentation in general discourages the long term objective of preserving land for agriculture. When fragmentation occurs as a result of creation of non-farm uses the process is almost irreversible.

Consequently, as a basis for agricultural land preservation policy, it is desirable to maintain relatively unfragmented areas, that is, districts dominated by relatively large farm holdings, as free as possible from conversion into smaller holdings especially if these are non-agricultural uses. When such areas further coincide with soils of high agricultural capability, the argument for protection is considerably reinforced.

In the course of this study, a survey of each lot and concession within the four Townships was undertaken using the 1976 Assessment Rolls and for each lot outside of identified settlements an inventory was made as follows:

Tenure
- owner
- tenant

Use
- farm
- non-farm

Farm Size
- 1-5 acres
- 5-10 acres
- 10-25 acres
- 25-50 acres
- 50-100 acres
- 100 acres and over

The number of parcels in each farm size category were then totalled by concession and lot.

Based on the above information a series of Fragmentation Inventory Maps were compiled for each of the four Townships. Each map references the number of individually separated parcels within each lot and concession according to size of lots.

These maps are shown in Appendix B to this report. Though useful individually it is difficult to obtain a composite picture of the overall extent of fragmentation occurring in the rural countryside when viewing these maps singly. An attempt was therefore made to create a composite index which would combine the extent of farm parcellation by different size categories into a single mapping scheme for each municipality.

To do this, an unbiased points weighting system was developed which applied a 5 point penalty to each worsening situation as represented by either a decrease in parcel size or an increase in the number of parcels within each size group. This uniform 5 point penalty avoids the introduction of value judgement in assessing degrees of fragmentation. For instance one should avoid any conclusion based on "how much more" a combination of number of parcels and size of parcels is worse or better than any other combination. This methodology merely allows one to add up the points for each parcel size group and to make consistent comparisons and contrasts for lots and concessions within the same municipality.

The structure of the weighting scheme is illustrated below. The average lot size in the Townships of North Dumfries, Wilmot and Wellesley was found to be 200 acres, and in the Township of Woolwich to be 400 acres. Consequently, other things remaining equal, the number of parcels per lot was potentially higher in Woolwich than in the remaining three Townships. Because of this a similarly structured scheme but with a wider range of number of parcels per lot was developed for Woolwich Township.

WEIGHTING SCHEME

Average Lot Size
= 200 Acres

Wilmot Township
Wellesley Township
North Dumfries Township

NO. OF PARCELS	PARCEL SIZE					
	1-5	5-10	10-25	25-50	50-100	100+
1	110	85	60	35	15	10
2	115	90	65	40	20	5
3	120	95	70	45	25	-
4	125	100	75	50	30	-
5+	130	105	80	55	-	-

WEIGHTING SCHEME

Average Lot Size = 400 Acres — Woolwich Township

NO. OF PARCELS	PARCEL SIZE					
	1-5	5-10	10-25	25-50	50-100	100+
1	125	100	75	50	25	20
2	130	105	80	55	30	15
3	135	110	85	60	35	10
4	140	115	90	65	40	5
5+	145	120	95	70	45	-

Appendix Maps A1 to A24 show the fragmentation data maps for the four Townships. All separated parcels of a given size are inventoried as to the number of parcels of that size there are in a particular lot. On the basis of the Weighting Scheme represented above a total number of points can then be allocated to each lot based on the extent of fragmentation. For example, the fragmentation data for Block "B", Concession I, Lot 1 in Wilmot Township is as follows:

Farm Size Group (Acres)	Number of Parcels	Derived Points
1 - 5	0	0
5 - 10	1	85
10 - 25	1	60
25 - 50	1	35
50 -100	2	20
100+	0	0
Total Scores	5	200

The range of total scores were grouped into the following categories based on which a legend for creating the composite maps for each Township was derived.

Scores Woolwich		Scores North Dumfries, Wellesley, Wilmot
1-150	1. Relatively unfragmented	1-75
151-250	2. Low level fragmentation	76-125
251-300	3. Moderately fragmented	126-200
301-400	4. Significantly fragmented	201-275
400+	5. Very highly fragmented	275+

It should be remembered that because the unit of data inventory is the lot, that data is depicted on that basis. Therefore lots which show fragmentation to be occurring may in fact have fragmentation of a very localized nature, for example along a major road or in one corner of the lot. Consequently,one should not automatically conclude that the problem of fragmentation is general throughout the lot.

Of all four Townships, Wellesley is revealed to be the least fragmented with land division occurring primarily adjacent to major settlements or including unidentified settlements or residential clusters such as Paradise Lake.

There are more concentrations of higher intensity fragmentation of land in the three Townships of North Dumfries, Wilmot and Woolwich. In the case of Woolwich Township excessive pressure can be observed along the Highway 85 corridor north of Waterloo City boundary and also along the Highway 86 corridor east of Elmira. In the former Waterloo Township area within Woolwich Township much fragmentation has been identified and this is particularly severe along the Highway 7 corridor eastward to the Wellington County line.

In Wilmot Township the greatest fragmentation pressures are associated with several small hamlets scattered throughout the Township. In addition there appears to be some "spread effects" radiating out from these settlements. The central east-west axis of the Township appears most

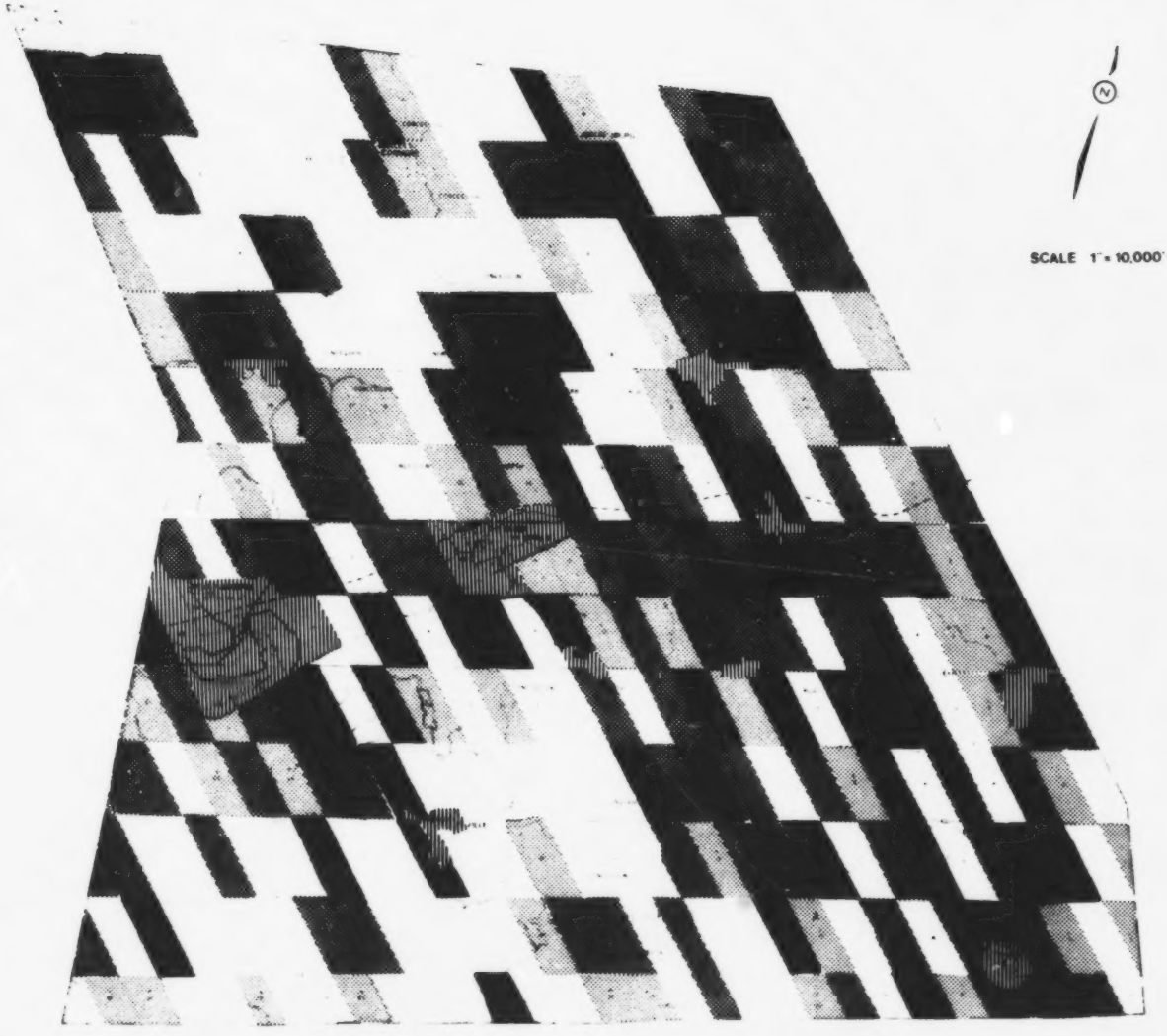
LEGEND

- Relatively Unfragmented
- Low Level Fragmentation
- Moderately Fragmented
- Significantly Fragmented
- Very Highly Fragmented
- Settlement Areas

TOWNSHIP OF NORTH DUMFRIES

INTENSITIES IN FRAGMENTATION OF RURAL LAND

SCALE 1" = 10,000'
TOWNSHIP OF WOOLWICH
INTENSITIES IN FRAGMENTATION
OF RURAL LAND
LEGEND
Relatively Unfragmented
Low Level Fragmentation
Moderately Fragmented
Significantly Fragmented
Very Highly Fragmented
Settlement Areas



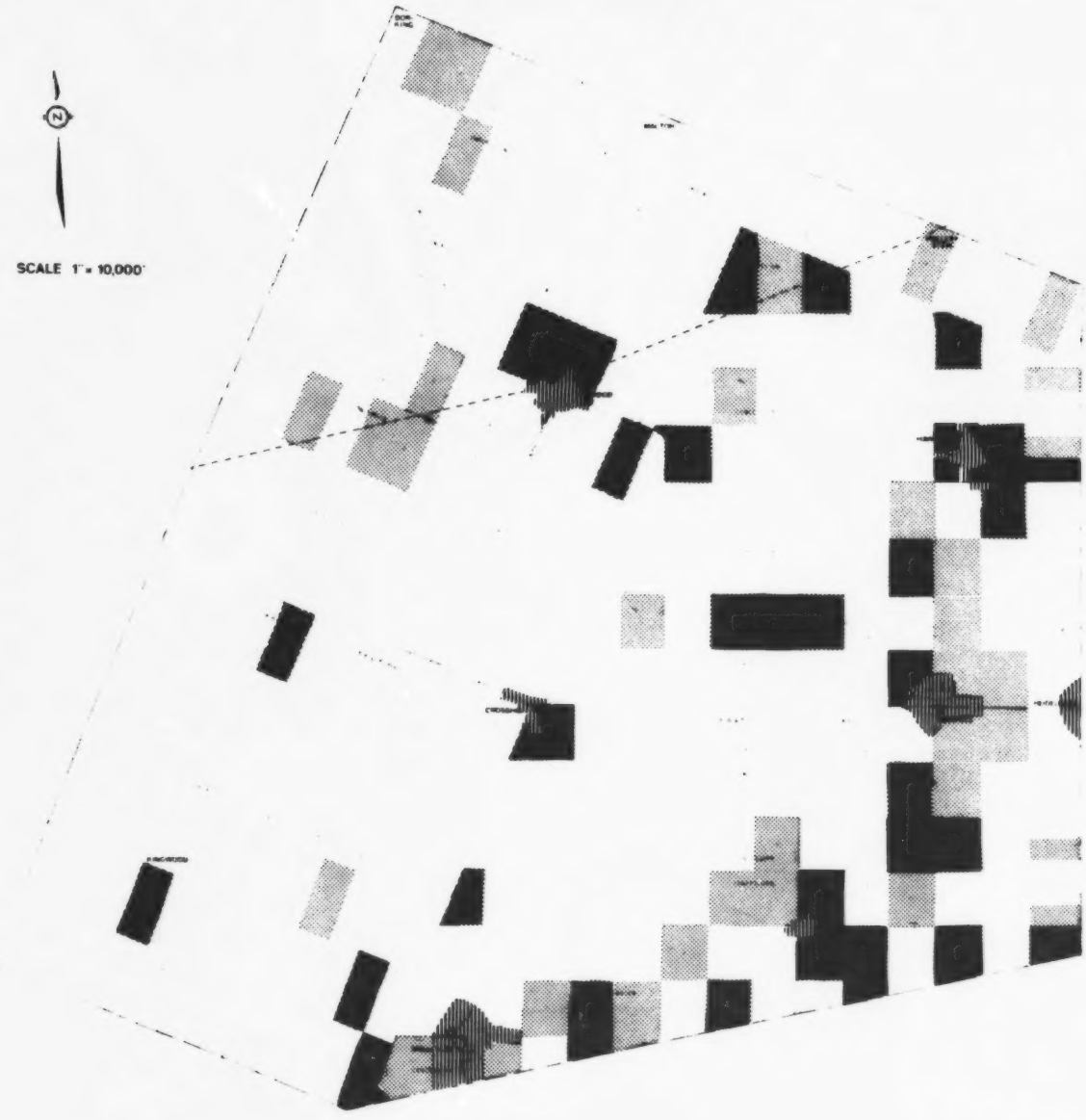
SCALE 1" = 10,000'

LEGEND

- Relatively Unfragmented
- Low Level Fragmentation
- Moderately Fragmented
- Significantly Fragmented
- Very Highly Fragmented
- Settlement Areas

TOWNSHIP OF WILMOT

INTENSITIES IN FRAGMENTATION OF RURAL LAND



LEGEND

- Relatively Unfragmented
- Low Level Fragmentation
- Moderately Fragmented
- Significantly Fragmented
- Very Highly Fragmented
- Settlement Areas

TOWNSHIP OF WELLESLEY

INTENSITIES IN FRAGMENTATION OF RURAL LAND

threatened by fragmentation pressures. As a result the Township has only a few relatively unfragmented districts which are distributed haphazardly and give the Township the appearance of a still relatively rural area undergoing intense urban development pressures throughout the country-side.

In North Dumfries, the pressures on farmland appear to be much more localized and are concentrated in the lots east and west of the Grand River and Concession VII, Lots 21-27. Pressure points are developing on the North Dumfries -Kitchener Boundary east of Township Road 8, and west of the Dickie Settlement Road. Similarly, along Highway 8 at the North Dumfries-Cambridge Boundary a trend to increasing fragmentation can be seen. Notwithstanding, a large reasonably cohesive area of low fragmentation impact remains toward the central sections of the Township and to the east (Beverly) and south-east of Cambridge.

The resulting maps visually provide a comparison of the location and relative degree of fragmentation occurring within the Townships. This process as demonstrated and the results could be the basis for an objective approach to farmland conservation. Policies within the Regional Official Policies Plan [1/] state that "an agricultural classification based on soil capability be placed on all lands outside of Policy Area A to D on Map No. 1 and other recognized settlements in this Plan and Area Municipal Official Plans and that this be incorporated into all Area Municipal Official Plans...". Similarly in the Food Land Guidelines [2/] it is stated:

> "Within agricultural designations, consideration must be given to maintaining parcel sizes that will be useful for agricultural purposes in the long run"...
>
> "In summary, parcel size in agricultural areas must consider land capability, flexibility, and suitability, as well as the shorter term viability, to ensure that the land base remains useful into the future".

By combining the data on farm fragmentation with existing mapping on agricultural land capability, area municipality planners could develop the basis for a more sensitive Official Plan Designation and Zoning of rural land. For

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1/ Chapter 8, Policy 34, Regional Official Policies Plan.

2/ Food Land Guidelines Sections 4A.14-4A.19 Page 17.

example areas of high agricultural capability and large farm holdings could be the districts where most protection might be provided. At the same time there will continue to be pressures for smaller parcel sizes to accomodate intensive livestock operations such as poultry, pigs etc., or to locate valid accessory or ancillary agricultural operations. Subject to other policies such as the Minimum Distance Separation Formula, such uses should be encouraged to locate on already separated smaller sized parcels.

SUMMARY

Until now Regional and Area Municipality Official Plans have attempted to define agricultural districts primarily in terms of high quality soils. Other social, economic and locational criteria equally significant in determining whether or not particular areas have the potential for long term agriculture tend to be ignored. This Township by Township evaluation provides a first step in identifying prime agricultural lands. We have assumed that farm fragmentation is indicative of a long term management response to the economics of farming. When fragmentation results in the entry of rural non-farm uses or the prevalence of part-time agriculture, the stability of an agricultural district is lost.

This evaluation has shown that the intensity of land fragmentation increases with location to major primary roads and that lands abutting such roads are highly susceptible to conversion to non-farm purposes. The implications of these observations should be considered.

1. Agricultural districts can be more sensitively defined in Official Plans by combining soils criteria with the social, economic and locational criteria subsumed in fragmentation factors.

2. Based on the above a hierarchy of agricultural districts can be identified as follows:

   - High agricultural capability and low fragmentation

   - Low agricultural capability and low fragmentation

   - High agricultural capability and high fragmentation

   - Low agricultural capability and low fragmentation.

3. Following on a more sensitive agricultural district pattern, agricultural zoning categories which recognize the full potential of special areas with Townships may then be prepared.

4. In some instances development within defined settlements tend to create further pressures for development radiating outward along Township and Regional Roads. In many cases fragmentation is restricted to sections fronting on the road. Whether these are within planned subdivisions or in isolated severances the impact on the rest of the lot should be recognized.

VII. AGRICULTURAL DESIGNATIONS AND POLICIES

In the Regional Municipality of Waterloo, the function of planning for agriculture is shared between Regional and local Municipal levels of Government. The Regional Plan sets out generalized "umbrella" policies and requires that these be detailed in local area Municipal Official Plans, and be implemented at that level. This approach of the one plan indicating strategic policies and the other filling in the land use details on an area specific basis requires coordination and consistency between the two planning jurisdictions in order to achieve the common objective of farmland preservation, proper land utilization and minimization of land use conflicts in rural areas.

The Regional Official Policies Plan leaves to the Area Municipality responsibility for:

1) Determining what are acceptable agricultural pursuits.

2) Establishing a suitably useful classification for planning purposes on soils outside Policy Areas "A" to "D".

3) Identifying existing settlements and creating new settlements where these are likely to least impact highly productive farmlands, and farming operations.

4) Refining agricultural designations, Official Plans and Zoning categories in Zoning Bylaws to implement Regional Policy intent.

The status of planning for agricultural land varies widely among the constituent municipalities within the Regional Municipality at the present time.

All municipalities are however, moving to implement the intent of the Regional Official Policies Plan. This requires specific policies in those plans which address the details of land use designations and priorities in land utilization. For example, it is suggested that agricultural designations based on soil capability be included in Area Municipality Official Plans (Chapter 8:34); in agricultural policy areas the first priority will be for agricultural pursuits and any legal changes in the use of land will be severely restricted subject to the policies of the Regional and Area Municipality Official Plans (Chapter 8:33).

TOWNSHIPS POLICIES (NORTH DUMFRIES, WELLESLEY, WILMOT, WOOLWICH)

The four rural municipalities are the ones most affected by proposed agricultural policies. All four Townships are in

the final process of approving Official Plans for their respective areas. In this process they have coordinated their efforts in an attempt to have mutually consistent, if not similar policies pertaining to agricultural land. The main features of this approach are as follows:

1) All lands outside of settlements are designated Rural Land Use Category in which the primary land use consideration is "the protection, preservation and encouragement of the use of lands for food production."

2) Within the land use category, the Plan recognizes two land use areas based on soils classification, namely,

   a) Prime Agricultural Soils
   b) Lands which are not Prime Agricultural Soils

   (In general, this distinction coincides with the classification in the Regional Official Policies Plan whereby prime soils equate to agricultural policy areas A and B in the Regional Official Policies Plan (Map Number 2).

3) Within prime agricultural soils, the main policy will be to preserve and protect agricultural land for food production. Exception to this policy must not violate the Regional Plan, must be in the public interest, must not render an otherwise economic parcel of land non-viable, and must not adversely affect agricultural operations on adjacent lands.

4) Uses in addition to food production may be permitted on lands which are not prime agricultural soils. Such uses shall be specified in the Zoning Bylaw and may include public or quasi-public uses, recreational uses, commercial and industrial uses oriented to and compatible with the needs of agriculture, and limited residential uses permitted under policies for severances within the Rural Land Use Category and the Zoning Bylaw.

Farm-related occupations which are defined as a trade service or occupation serving the needs of residents within the Rural Land Use Category as uses secondary to food production are permitted within the Rural Land Use Category subject to the Zoning Bylaw. In this regard, the zoning bylaw shall specify:

i) specific use or uses to be permitted

ii) minimum lot size

iii) maximum area of land to be used

iv) regulations as to building and structures, siting etc.

Sand and gravel resource extraction operations are considered as uses secondary to food production within the rural land use category. However establishment of a pit or quarry and extraction of aggregate will be subject to a full review to ensure need, the agricultural function of the land, other potential locations with less negative impact, and the potential for rehabilitation of the site for food production.

City of Cambridge

Amendment Number 4 to the Official Plan for the Cambridge Planning Area incoprorated most of the provisions of the Regional Official Policies Plan with regard to:

1) Identification of existing settlements
2) Creation of new settlement areas
3) Conditions for severance of land for the location of non-farm residences within and outside settlement areas
4) The protection of agricultural areas within the City.

It will be noted that within the City of Cambridge lie extensive farm areas having high quality soils for agriculture. These lands for the most part are not expected to be developed in urban uses before the year 2001. Amendment Number 4 is therefore, an important complement to the Regional Plan.

More specifically the Amendment identifies by map schedule thirteen existing settlement areas within the city limits within which severances will be permitted up to 30% of the pre-existing number of lots. Beyond this growth an Official Plan Amendment will be required.

A limited amount of rural severances (ie.) outside settlement areas may be permitted provided that the new residence is more than 1,000 feet from an existing or proposed non-farm residence; that the impact on agricultural land is minimal; that the parcel is no larger than 5 acres; the topography is difficult to cultivate; the soil is not suitable for cultivation; and the proposal conforms to the requirements of the Agricultural Code of Practice for Ontario.

With regard to new settlement areas such as rural estate development the amendment proposes that such development be allowed to occur only through an Official Plan Amendment and by plan of subdivision rather than severance. In these cases, municipal evaluation criteria require that such proposals are:

1) Not located on Class 1, 2 and sometimes Class 3 lands.

2) Not on viable sand and gravel deposits.

3) Not within flood plains or ecologically sensitive areas.

4) Not on full municipal services.

5) Subject to an Environmental Impact Statement and tree saving plan, if located within woodlots.

Cities of Kitchener and Waterloo

Neither of these two municipalities contain specific policies on agricultural land planning within their Official Plans. The Kitchener Plan contains a large area outside of proposed development areas in an "undesignated" status. However, the plan indicates that the Regional Official Policies Plan regulations for development control, agricultural land, sand and gravel extraction, and environmental control shall apply in those instances. The Waterloo Official Plan shows such areas as "undesignated" and does not contain any prescriptive policies for planning in such areas.

All three urban municipalities have recognized the importance of revising or amending their official plans to reflect and implement the new Regional severance policies as well as to prepare more sensitive area municipality policies on agricultural land.

Implementation of Agricultural Policies

In practice, it has been found that there are several recurring issues related to land use planning for agriculture which create a problem in implementing policies at both the area municipality and regional levels. Some of these are discussed below:

1. It is agreed that sufficient information exists for the development of refined agricultural districts at the Area Municipal level. Each district may even prescribe the types and sizes of agricultural operations preferred, and without restricting any existing operations, work towards conserving good farmland in locations and parcel sizes which are viable and flexible for future agriculture. For instance districts where agri-business operations such as grain milling, trucking, veterinary offices, implement dealerships or special intensive livestock operations might be located, could on this basis be differentiated from typically large size resource oriented agricultural operations.

2. Definition of "agricultural purposes", uses oriented to agriculture", "uses compatible with the needs of agriculture", "agricultural needs of the community" and other terms such as these need to be more clearly established and the rationale for their continuance be indicated. From experience over the last six years interpretation of these sections of local Plans has been confused. For example:

   - How much business must be done by the proposed use for the agricultural community before it qualifies as a use oriented to agriculture?

   - Is an agricultural use only one directly engaged in the growing of food and fibre and the raising and tending of livestock or any use which contributes to these purposes as well?

3. Planning for residents in rural areas, particularly farmers should not be separated from planning for agriculture itself. This issue is clearly seen in the conflicting objective of policies which try to meet "The agricultural needs of the community" and those meeting "The needs of the agricultural community". However, where policies provide for services for rural residents, it is necessary to ensure that such services are not better located in settlement areas.

4. Compatibility with the needs of the agricultural community could be interpreted to mean alternatively "not in conflict with the needs of the agricultural community" or "directly and indirectly providing a benefit to the agricultural community". Depending on the interpretation, the effect of this policy could be extensive or restrictive. In our view it should be the prime objective that only those uses which directly contribute to the maintenance of agriculture in rural areas, or are necessary by their location to provide a satisfactory lifestyle for farm-families, should be permitted within rural areas. In addition, whenever possible, such uses should be encouraged to locate in rural service towns.

5. "Commercial and industrial uses of a dry nature which are oriented to agriculture" have often been permitted within agricultural designations of the Township Official Plans. With the proposed new Official Plans for the Townships such uses could continue to be located in the land use category on "lands which are not prime agricultural soils." In some cases such uses could give rise to environmental problems and should not be located within established settlements. However, there are many instances where uses of this type could be safely integrated within established rural communities contributing to the stability

and vitality of such settlement. This should be encouraged whenever possible.

6. One of the major issues affecting agricultural planning is the constraint to development posed by application of the Minimum Distance Formula of the Agricultural Code of Practice for Ontario. Recent efforts by Ministry, Township, and Regional Planners have succeeded in restricting new urban settlements or expansion of existing settlements within rural areas if such growth was likely to threaten existing livestock operations. Notwithstanding the above, it is clear that livestock operations within existing settlements or on the fringes of settlements are imperilled by the liklihood of urban growth surrounding or encroaching on them. It is therefore suggested that municipalities be more sensitive to the long-run impacts of expansion proposals for settlements and introduce protective policies where necessary to protect agricultural livestock operations in particular on the edges of settlements. In the case of livestock operations within an established settlement around which development has been allowed to occur policies on environmental abatement with or without public subsidy or alternatively assistance to relocate might be considered.

7. Some municipalities have tended to permit uses such as "conservation and accessory uses", "recreation facilities", "public uses" etc. within the agricultural designation. Even if such uses are confined to non-prime agricultural areas it must be recognized that in terms of the price and speculative expectation causes thereby, the school sites or golf courses which result from this are just as disruptive to agricultural stability.

8. To a considerable extent the pressures on farmland in the rural Municipalities have been the result of pressures existing in the urban areas. As far as the Townships are concerned adequate provision for growth within established settlements and provision for creation of new centres rural should be a major concern as a means of taking pressure off good farmland.

Review of Area Municipality Zoning Bylaws

Existing bylaws in all seven area Municipalities with the exception of the former Beverley Township Area, Cambridge Bylaw No. 834 (Hespler), Cambridge Bylaw No. 2750 (Preston) contain agricultural zones.

The remaining eleven zoning by-laws all have agricultural zones which contain a wide variety of permitted uses. A total of twenty-four uses permitted have been identified and these are shown on Appendix . A number of these are general categories within which there are numerous sub-categories. Many uses which do not seem compatible with the rural-agricultural environment appear in some of the bylaws. Some obvious examples are hotels, motels, and private hospitals.

Not only are uses permitted by some of these by-laws permissive but the definitions or the lack of clear definitions make implementation of the by-laws difficult and discretionary. This defeats the purpose of a zoning by-law which should be clear, explicit and self-explanatory. Surprisingly the Township Zoning By-laws for agricultural zones are more permissive than those for the three cities. For example, North Dumfries By-law No. 1418 permits nineteen (19) different uses in rural areas while Kitchener By-law No. 4830 and Cambridge By-law No. 934 permit seven (7) types of uses. Because of vagueness the overall number of uses may be increased. For example, such uses as parks, sports clubs, recreation areas, sales barns, race tracks are not limited to specifically stated uses, but can cover a wide range of activities.

Definitions in these by-laws focus on buildings, lot sizes, dimensions of properties and avoid descriptions or definitions of what constitutes farming, farmer, agriculture etc. Two local By-laws, Beverly No. 72.22 and North Dumfries No. 1418 attempt to set out specific uses that are generally accepted as "farming" operations. It is important that these terms be clearly and logically defined as they provide the basis for establishing eligibility for severances within the Area Municipalities. In order to alleviate pressures on rural land it is important that Municipality Official Plans be reviewed to clearly define "farm operations", the conditions under which farm residential buildings will be allowed in agricultural zones, to rationalize size qualifications for various types of farm operations, and to establish the criteria under which non-farm residential buildings may be permitted.

After several months of public discussion, representatives of the seven Area Municipalities have finalized a policy position on these and related issues. There appears to be a concensus that non-farm severances should be discontinued in rural areas. Also there is agreement that retiring farmers should no longer receive special consideration in qualifying for farm-related severances. This trend together with recommendations being promoted by Regional Planning staff to increase the size qualification for "farm" parcels (under which farm-related severances would be granted) should reduce many of the pressures being placed on agricultural land.

REVIEW OF AGRICULTURAL ZONES IN AREA MUNICIPALITY ZONING BY-LAWS

Uses Permitted in Agricultural Zones	North Dumfries By-law #1289	Wilmot By-law #1175	Wellesley By-law #1617	Township of Waterloo By-law #878A	Kitchener By-law #4830	Waterloo By-law #1418	Beverly By-law #1137	Beverly By-law #72-22	Woolwich By-law #1400	Cambridge By-law #934	Cambridge By-law #2469	Cambridge By-law #834	Cambridge By-law #5319	Cambridge By-law #1139	Cambridge By-law #2750
1. Farming (Agricultural Use)	X	X	X	X	X	X	Not a	X	X except a fur farm	X			X		
2. Single Family Dwelling	X	X	X	X	X	X	rest-ricted	X (also con	X	X			X		
3. Summer Cottage or Cabin (not a permanent residence)	X						area by-law	versions to duplexes)					X		
4. Buildings for the housing of farm labour	X	X	X	X			there-fore		X						
5. Public or private hospital or convalescent home, a home for the aged, incapacitated or under-privileged	X	X	X	X		X	any use is per-mitted		X		(NO AGRICULTURAL ZONE IN THE BY-LAW)	(NO AGRICULTURAL ZONE IN THE BY-LAW)	X	(NO AGRICULTURAL ZONE IN THE BY-LAW)	URBANIZATION ZONE PERMITS AGRICULTURAL USES
6. Park	X	X	X	X		X	in the		X	X			X		
7. Golf Course	X	X					area						X		
8. Sports Club, Playground, or Recreational Area	X		X	X		X	covered by the			X			X		
9. Hotel, Motel	X						bylaw						X		
10. Gravel Pit, Stone or Lime Quarry	X						(i.e. the								
11. Institutional Uses - School or Church	X	X	X	X		X	Beverly Section	X	X	X			X		
12. Library or Community Hall	X						of North						X		
13. Public Use	X	X	X	X	X	X	Dumfries	X	X	X			X		
14. Radio, T.V., Boadcasting Stations	X														
15. Sales Barn	X												X		

Uses permitted in Agricultural Zones	North Dumfries By-law #1289	Wilmot By-law #1175	Wellesle By-law #1617	Township of Waterloo By-law #878A	Kitchene By-law #4830	Waterloo By-law #1418	Beverly By-law #1137	Beverly By-law #72-22	Woolwic By-law #1400	Cambridg By-law #934	Cambridg By-law #2469	Cambridg By-law #834	Cambrids By-law #5319	Cambrids By-law #1139	Cambrids By-law #2750
16. Airfield	x												x		
17. Office for a Veterinary Doctor	x		x										x		
18. Horse Race Track	x												x		
19. Cemetery or Mausoleum	x	x	x	x	x	x			x	x					
20. Home Occupation Use for a Physician		x	x	x		x		x	x	x					
21. Commercial Riding Stable or Academy					x								x		
22. Greenhouse or Landscape nursery stock farm					x										
23. Kennel or Dog Training School					x			x							
24. Rural Home Occupations (painting, teaching lessons, sculpting, etc.								x							

From the summary of uses permitted in agricultural zones within the various local area municipality zoning by-laws, and following the review of permitted uses within Agricultural Designations in Local Area Official Plans, it is obvious that many uses now permitted should be reconsidered. Such uses should be either confined to "Village" or similar urban oriented zones, or where unavoidable (e.g., Gravel Pits, Airfields) require specific zone changes to permit their location within agricultural areas. In such cases a thorough evaluation of impacts on agricultural operations and a study of alternative areas and solutions should be necessary.

In the light of our experiences in administering these Zoning By-laws, a few additional problem areas repeatedly arise. These are discussed below with outlines as to how they might be resolved.

1. Provisions for Home Occupations Within Agricultural Zones

Partly because of seasonality in farming practices, and partly due to the need for farmers to supplement farm incomes with employment outside of farming it is a prevalent practice for farm operators to undertake other operations on their holdings. These additional jobs may be related to agricultural needs, such as grain milling, hauling of agricultural products; they may only partially service the farming community (e.g.) repair of farm machinery, welding, well-drilling; or they may bear no direct relation to the business of farming (e.g.) furniture manufacturing and refinishing, barbering. In some cases home occupations begun as a hobby may expand into a major occupation and pose problems as to its conformity with the zoning by-law and whether it should be recognised.

In some cases home occupations may be conducted by the farm housewife (e.g.) dressmaking, baking. In some instances such as those above there may be no visible change to the buildings and sites on the farm, in other cases new buildings, outside storage of materials and/or vehicles are necessary. Sometimes such home occupations always remain a secondary source of income; in other instances they grow into the major occupation giving employment to persons outside of agriculture.

As a general rule most planning requirements encourage location of employment facilities of these types within

established identified settlements. However where this is not feasible it would be desirable to maintain agricultural zonings on all properties specifically re-zoning particular sites for home occupations. Such re-zoning should however be for a specified period of time or be tied to ownerhsip or occupancy after which the site would revert to its former agricultural zone.

2. Recreational Areas Within Agricultural Zones

A second problem area is associated with the inclusion of recreational uses within agricultural zones. This is potentially a disruptive influence to the farming industry . Recreational facilities tend to be high traffic attractors which in turn, conflict with slow-moving, wide farm vehicles. Recreational uses such as golf courses bid up the price of farmland beyond agriculture's ability to pay causing disturbances in the agricultural land market. Some recreational uses have heavy demand on ground water resources thereby competing with agricultural needs. The impact of intensive livestock operations in terms of odour, dust, etc. often invite complaints from primarily urban users of recreational facilities.

In many respects recreational areas may be considered an urban oriented use and should be treated as such. Except where some predominant feature determines its location (e.g.) a ski-hill, primary recreation areas should be directed away from high quality agricultural areas. It may be that high priority recreation areas may not coincide with high priority agricultural land because of different site requirements.

3. Uses Accessory to Agriculture

There often appears to be confusion as to whether these uses which are permitted in most agricultural zones refer to those uses necessary for the conduct of the particular agricultural operation or uses generally related to the agricultural sector. In the former case where the particular proposed use is essential to the agricultural operation it would be a valid use within an agricultural zone. However where uses contribute to the maintenance of agriculture in general or incidentally serve agricultural operators, location within the agricultural zone need not be encouraged. For

instance, an operator involved in the trucking of animals to market does not have to locate within the agricultural zone. Someone engaged in well-drilling in general who also happens to drill farm wells does not have to locate within an agricultural zone.

4. Public Versus Private Uses

Many by-laws provide for inclusion of public uses such as recreational areas or health care institutions within agricultural zones. The interpretation of this provision has often been variously applied. In some instances this may be interpreted as funded or subsidised by a governmental agency; in other instances, it may mean accessible to the public at large on either a fee-paying or non-fee-paying basis; in still other cases, it may mean not privately owned; and in still other instances, free to the public at large. These definitions should be clarified.

5. Farm-Related Occupations

It has been shown that farm-related home-based occupations whether conducted by the farmer or any member of the farm family engaged in farming on the parcel where the residential unit is located, perform an important social and economic function. Provision for permitting farm-related home occupations within agricultural zones is now being considered by several rural municipalities within the Region. Farm related occupations in general may be located on a parcel with no residential unit there-on and so be simply a workplace. Proposed regulations would restrict such operations to not less than 25 acres in size, and the farm related occupation should not occupy more than 1 acre, or employ more than 2 part-time employees, or conduct sales of products not produced on the premises etc. Special provisions for an office or work-base for a householder are also being considered. This would permit householders to conduct supplementary work within their homes provided these meet the regulations on who may be thus engaged, size of operation, type of operation, maintenance of the primacy of agriculture and agricultural interests in such zones etc.

This approach is a welcome one in trying to provide for the income suplementation needs of rural residents while protecting agricultural zones from in-roads by competing uses.

APPENDICES

A. Rural Lands Converted to Settlements: 1967-1971, 1972-1976, Post 1976

-Township of Woolwich
-Township of Wellesley
-Township of North Dumfries
-Township of Wilmot
-City of Waterloo
-City of Kitchener
-City of Cambridge

B. Fragmentation of Rural Land
-Detailed Maps

-Township of Woolwich
-Township of Wellesley
-Township of North Dumfries
-Township of Wilmot

APPENDIX A

TOWNSHIP OF WOOLWICH

RURAL LANDS CONVERTED TO SETTLEMENTS

1967 - 1971				1972 - 1976				POST 1976			
	REF. NO.	ACS.	AGRIC. CAP.		REF. NO.	ACS.	AGRIC. CAP.		REF. NO.	ACS.	AGRIC. CAP.
	ELMIRA										
I		43.8	1	(a)		16.0	1	1		17.4	1
II		41.6	1	(b)		102.2	1	2		7.4	1
III		3.4	1	(c)		24.5	1	3		36.1	1
				(d)		57.3	1	4		13.8	1
								5		47.5	2
								6		16.6	1
	ST. JACOBS										
I		0.6	2	(a)		0.96	3	1		13.4	3
				(b)		3.2	3	2		15.0	3
				(c)		6.7	3	3		61.2	3
				(d)		1.97	3				
	HEIDELBERG										
I	RP 1289	7.0	1	(a)	RP 1341	2.9	1	1	RP 1437	7.4	2
					RP 1388	3.8	2				
	FLORADALE										
								1	77045	3.1	2
								2	77062	16.4	2
	CONESTOGO										
	WINTERBOURNE										
								1	78032	10.9	2
	CROWS FOOT CORNERS										
	BLOOMINGDALE										
	MARYHILL										
I	RP 1256	16.0	2					1	RP 1443	8.7	2
								2	77014	48.7	2
								3	78037	10.2	2
	BRESLAU										
								1	76023	63.4	2
								2	77004	134.7	2
	WEST MONTROSE										
					SUMMARY						
		95.8	1			202.9	1			91.3	1
		16.6	2			3.8	2			351.0	2
			3			12.8	3			89.6	3
		112.4				219.5				531.9	

TOWNSHIP OF WELLESLEY

RURAL LAND CONVERTED TO SETTLEMENTS

1967 - 1971				1971 - 1976				POST 1976			
NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.
	WELLESLEY										
I		1.6	2	(a)		.4	2	1	RP 1474	6.5	2
II		1.3	2	(b)		.5	2	2	78022	3.9	2
III		.96	2	(c)		1.0	2				
IV		2.0	2	(d)		.5	2	4	RP 1393	25.2	2
V		1.0	2					5	75518	9.8	2
								6	RP 1454	4.3	2
								7	75502	9.5	2
	LINWOOD										
				(a)	76027	56.2	2	1	79007	21.3	2
	ST. CLEMENTS										
				(a)	76015	6.1	3	1	77042	9.5	3
								2	77041	11.0	3
								3	77020	2.6	3
								4	RP 1352	28.2	3
	HEIDELBERG										
								1	RP 1439	54.7	4
	WALLENSTEIN										
								1	RP 1433	1.8	2
					SUMMARY						
			1				1				1
		6.86	2			58.6	2			82.3	2
			3			6.1	3			51.3	3
			4				4			54.7	4
		6.86				64.7				188.3	

TOWNSHIP OF NORTH DUMFRIES
RURAL LANDS CONVERTED TO SETTLEMENTS

1967 - 1971				1972 - 1976				POST 1976			
NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.
	AYR										
I		9.0	2	(a)		23.2	2				
II		18.2	2								
	ORRS LAKE										
				(a)	76019	24.6	2				
	LOCKIE ROAD										
				(a)	75514	8.9	1				
	ROSEVILLE										
	CLYDE										
	CLYDE ROAD							1	79010	16.6	4
	TOWNSHIP ROAD 4							1	76026	65.6	4
	GREENFIELD ROAD							1	RP1402	18.7	4
	HIGHWAY 401/97							1	RP1407	38.3	3
									RP1408	105.2	3
	TOWNLINE ROAD							1	RP1387	59.8	2
					SUMMARY						
			1			8.9	1				1
		27.2	2			47.8	2			59.8	2
			3				3			133.5	3
			4				4			100.9	4
		27.2				56.7				294.2	

TOWNSHIP OF WILMOT

RURAL LANDS CONVERTED TO SETTLEMENTS

1967 - 1971				1972 - 1976				POST 1976			
	REF. NO.	ACS.	AGRIC. CAP.		REF. NO.	ACS.	AGRIC. CAP.		REF. NO.	ACS.	AGRIC. CAP.
	NEW HAMBURG										
I		20.0	2	(a)		3.4	2	1	RP 1450	10.6	2
II		12.2	2	(b)		15.2	2				
III		4.5	2	(c)		30.1	2				
				(d)		12.1	2				
	BADEN										
								1	RP 1414	9.75	3
								2	77033	5.53	3
									76002		
								3	77034	3.76	3
								4	RP 1451	3.65	3
	NEW DUNDEE										
I		12.2	2	(a)		3.5	3	1	RP 1444	16.0	2
II		2.9	2	(b)		0.8	1	2	78027	3.2	2
III		1.3	3	(c)		14.5	1				
	ST. AGATHA										
								1	78029	8.1	3
	MANNHEIM										
				(a)	RP 1377	1.9	3				
	PHILIPSBURG										
								1	76030	103	3
	BLEAMS ROAD										
								1	Pt76024	±49.0	2
					SUMMARY						
			1			15.3	1				1
		51.8	2			60.8	2			105.4	2
		1.3	3				3			133.8	3
			4				4				4
		53.1				76.1				239.2	

WATERLOO

1967 - 1971				1972 - 1976				POST 1976			
NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.
I		546.3	2	(a)		316.9	1	1	Pt1459	125	3
II		225.1	1	(b)		45.9	3	2		66.8	3
II		11.5	2	(c)		434.5	3	3	Pt1459	20	3
IV		9.3	2	(d)		68.8	2	4	77023	25.0	1
V		57.4	3	(e)		80.3	2	5		8.6	2
VI		17.2	3					6	78006	138.7	3
VII		20.1	3	(f)		53.1	2	7	Costain	179.7	3
VIII		45.9	3					8	Wimpey	79.7	3
IX		114.7	3					9		13.9	3
X		63.1	3					10	Freure	42.3	3
XI		213.7	2					11	1460	16.8	3
								12	38019	11.3	2
								13	77029	25.1	2
								14	77040	9.1	2
								15	76018	19.8	2
								16	78020	8.9	2
								17	1467	47.3	3
								18	77006 ? 1453	120	3
								19	1465	13.6	1
								-			
								21		66.0	3
								22	76001	19.2	1
								23		111	1
					SUMMARY						
		225.1	1			316.9	1			168.8	1
		780.5	2			202.2	2			82.8	2
		318.4	3			480.4	3			916.2	3
		1324				999.3				1167.8	

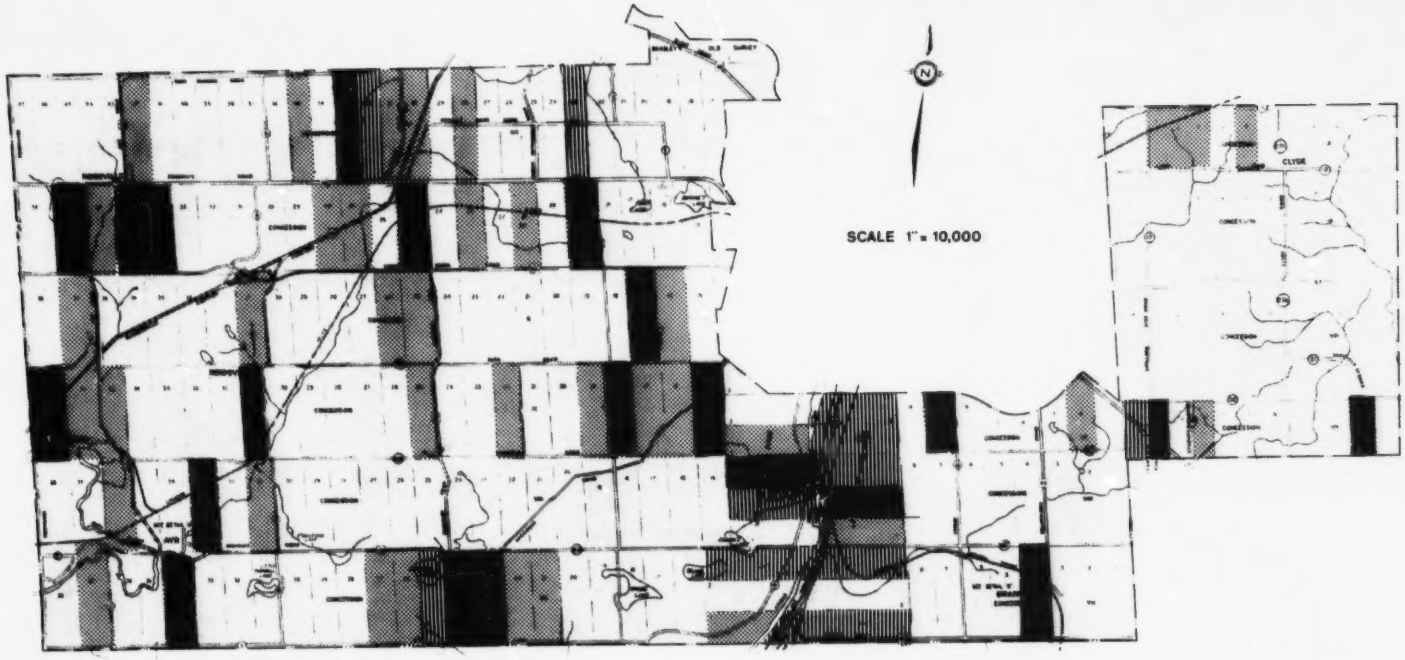
KITCHENER

1967 - 1971				1972 - 1976				POST 1976			
	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.	NO.	REF. NO.	ACS.	AGRIC. CAP.
		537.7	3	(a)		5.7	3	1	1418	94.2	3
I		113.3	3	(b)		514.0	3	2	77051	60.8	3
II		177.8	3	(c)		729.7	3	3	78023	135.6	3
IV		370.0	3	(d)		210.1	3	4	1458	7.6	3
V		187.8	3	(e)		43.0	2	5	79001	31.0	3
I		38.7	3	(f)		69.5	3	6	1445	20.1	3
II								7		5.7	3
III		48.8	2					8	77025	123.3	3
IX		83.2	3					9	77039	4.6	3
X		67.4	3					10	74328	160.6	3
								12	Forest Hts.	72.5	3
XIII		25.8	2					13	Pt1452	91.8	3
								14	1463	47.3	3
								15	Pt1452	72.9	3
								16	1475	6.4	3
								17	77048	47.7	3
								18	77030	53.6	3
								-			
								20	1460	38.2	3
								-			
								-			
								23	1441	126.0	3
								24		135	3
								25		121	3
								26	1455	74.5	3
								27	1487		
									76037	25.8	3
								28	1480	20.1	2
								29	1461	65.8	3
								30		16.5	
								31	24714	37.3	3
								32	1447	134.2	3
								33		156.6	2
								34	Natchez	81.2	3
								35	"	69.8	3
				SUMMARY							
		-	1			-	1			-	1
		74.6				-	2			176.7	2
		1575.9				1572	3			2137.7	3
		1650.6				1572				2314.4	

CAMBRIDGE

1967 - 1971				1972 - 1976				POST 1976			
	REF. NO.	ACS.	AGRIC. CAP.		REF. NO.	ACS.	AGRIC. CAP.		REF. NO.	ACS.	AGRIC. CAP.
I		101.4	2	(a)	Peel Vil.	198.6	2	1	1411	4.6	2
II		150.6	2	(b)	76013	8.3	5	2	1406	7.6	2
III		96.1	5	(c)	78031	105.4	2	3	1390	9.6	2
IV		15.8	4	(d)		248.1	4	4	1370	12.4	2
V		38.0	4	(e)		169.2	4				
VI		152.0	4	(f)		25.8	4	6	1394	1.6	2
VII		100.3	4	(g)		40.1	4	7	1396	1.4	2
VIII		578.5	2	(h)		40.2	4	8		6.0	2
IX		576.5	2	(i)		149.1	4	-			
X		67.4	2	(j)		4.0	4	-			
XI		17.2	3	(k)		212.1	2	11	78014	22.7	2
XII		28.7	2	(l)		458.9	3	12	25199	13.1	2
				(m)		86.0	2	13	1381	26.5	2
				(n)		1.7	3	-	76031		
				(o)	1369	187.7	3	15	76008	51.1	2
				(p)		60.3	2	16	1413	31.8	5
				(q)	25382	7.9	2	-			
									1368		
								19	75259	91.8	4
								20	80005	.91	4
								21	1416	8.4	4
								22	1388	8.9	4
								23	76040		2
									78004	175.0	
								24	77060	70.3	2
								25		9.1	2
								26	23993	10.9	2
								27	76029	27.0	3
								28	77013	22.2	3
								29	1400	97.3	3
								-			
								-			
								32	1369	20.5	3
								33	1377	5.7	3
								34	1393	12.0	3
								35	1412	20.8	2
								36	77017	66.3	2
									24978		
								37	76034	19.9	2
									22358		
								38	22045	8.3	2
									76012		
								39	77014	2.5	2
								40	75509	19.2	2
									77016		
					SUMMARY						
		-	1			-	1				1
		1503.1	2			564.9	2			558.9	2
		17.2	3			648.3	3			184.7	3
		306.1	4			676.5	4			110.2	4
		96.1	5			8.3	5			31.8	5
		1922.5				1893				885.6	

APPENDIX B



PARCELS 1-5 ACRES IN SIZE

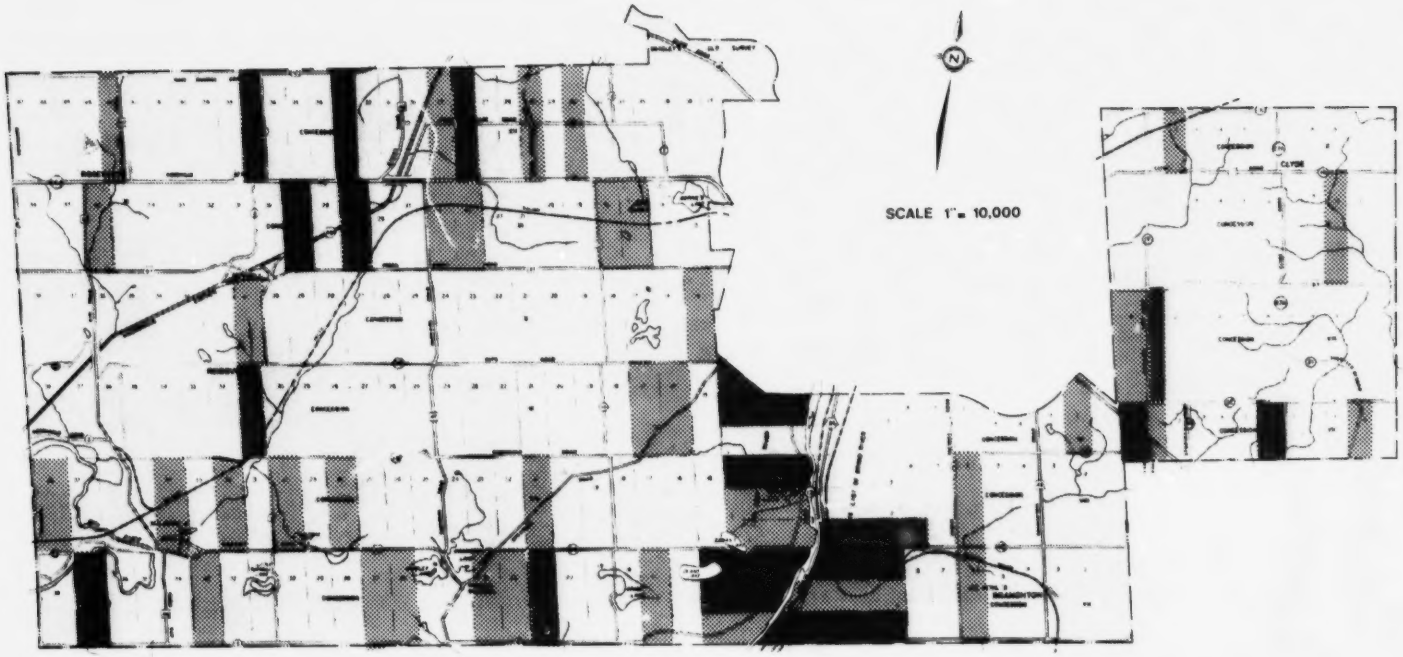
LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF NORTH DUMFRIES

FRAGMENTATION OF RURAL LAND



PARCELS 5-10 ACRES IN SIZE

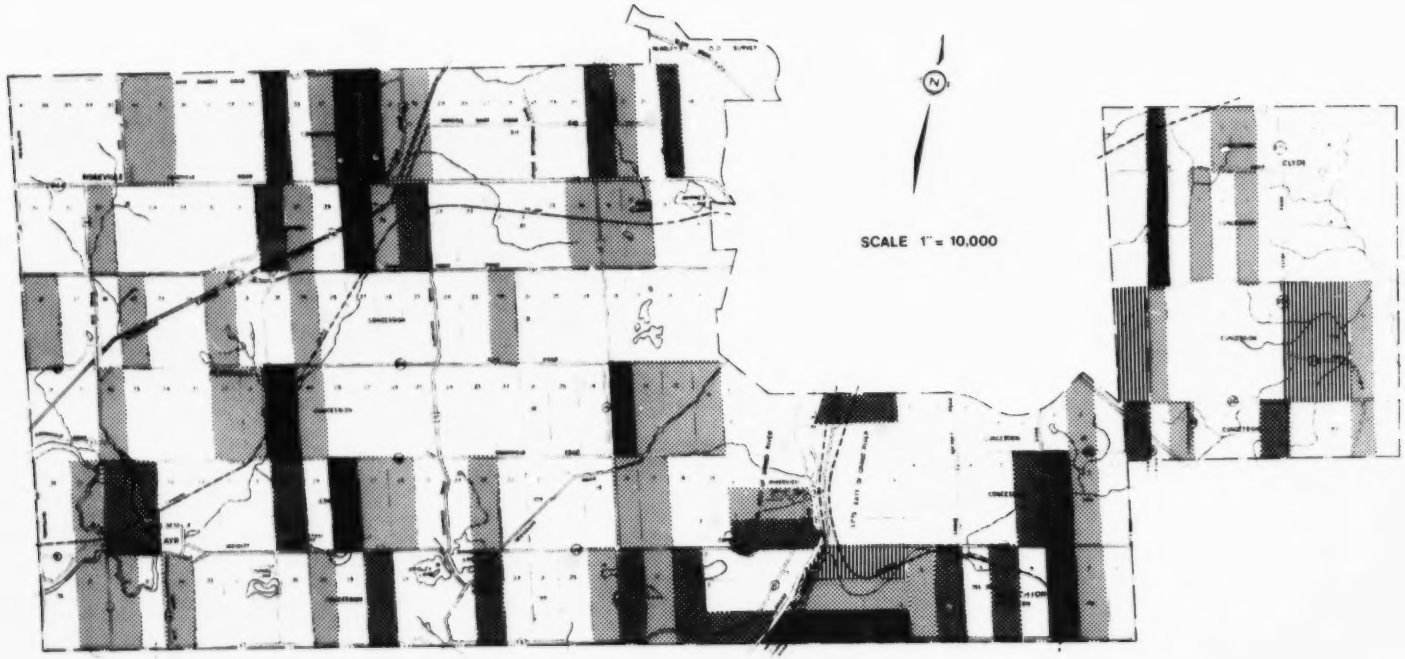
LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF NORTH DUMFRIES

FRAGMENTATION OF RURAL LAND



PARCELS 10-25 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF NORTH DUMFRIES

FRAGMENTATION OF RURAL LAND

PARCELS 25-50 ACRES IN SIZE

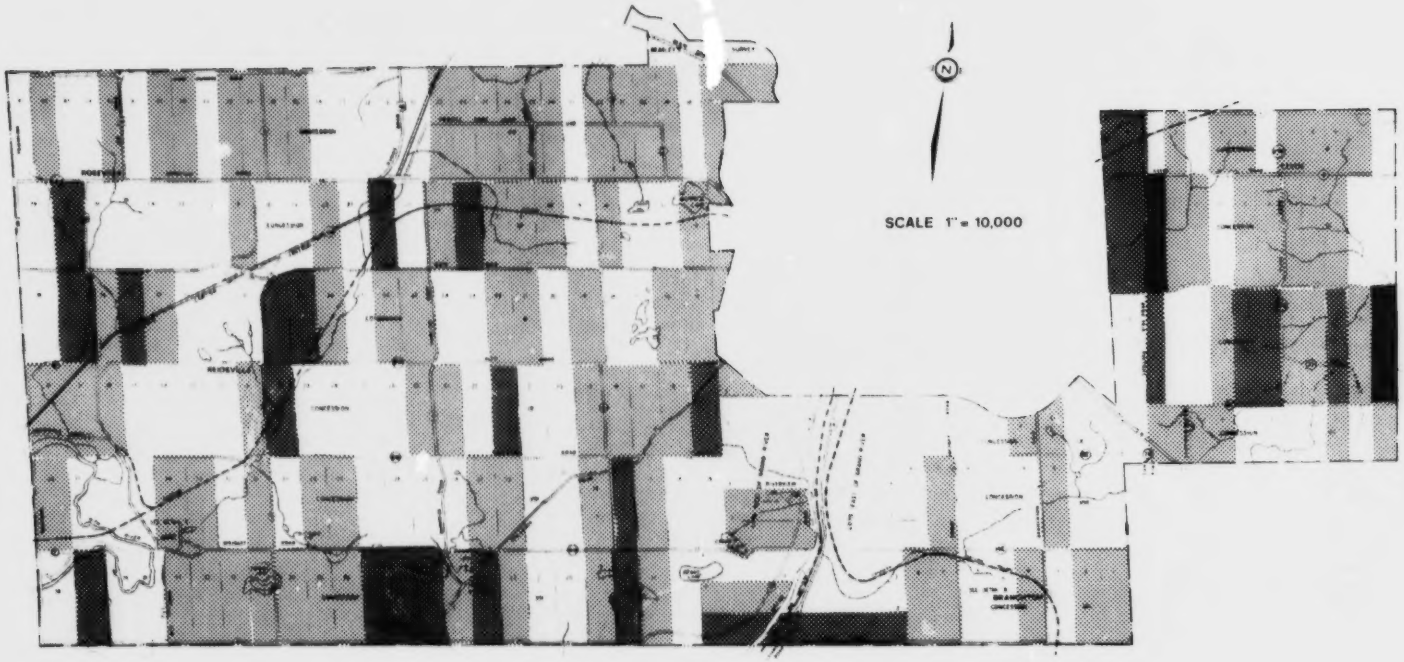
LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF NORTH DUMFRIES

FRAGMENTATION OF RURAL LAND



PARCELS 50-100 ACRES IN SIZE

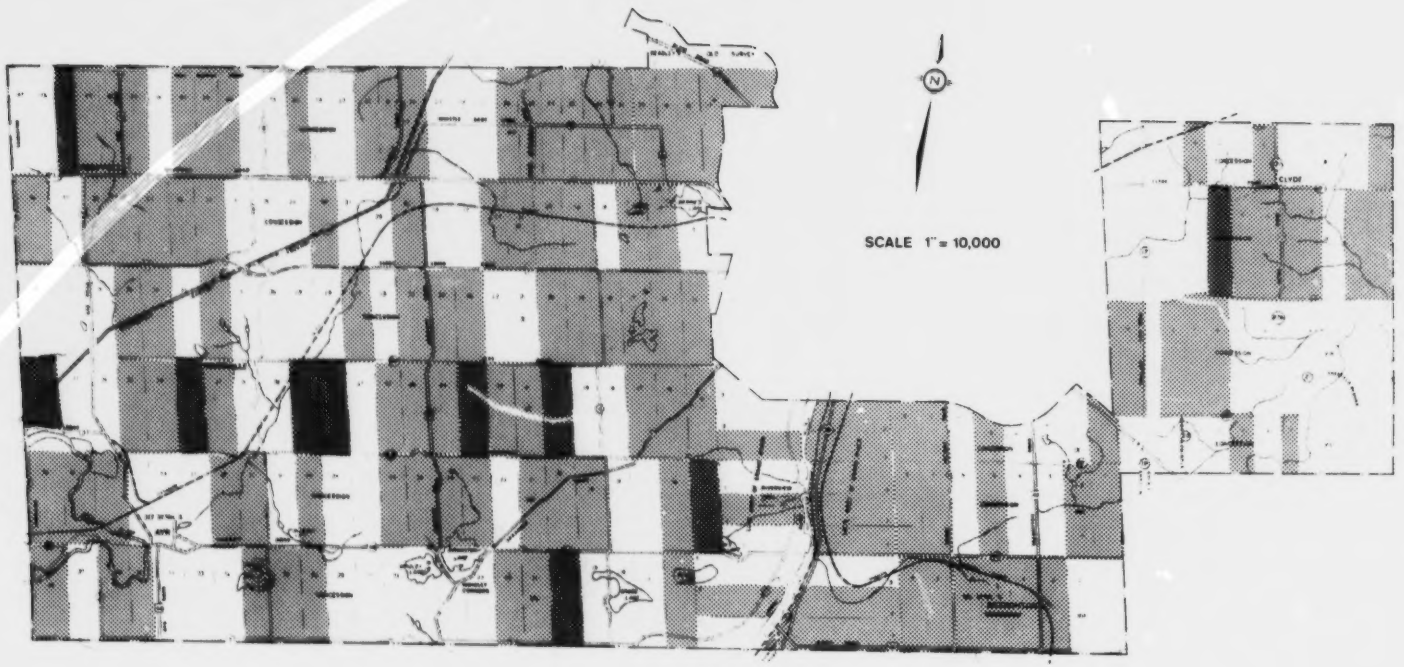
LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF NORTH DUMFRIES

FRAGMENTATION OF RURAL LAND



PARCELS 100+ ACRES IN SIZE

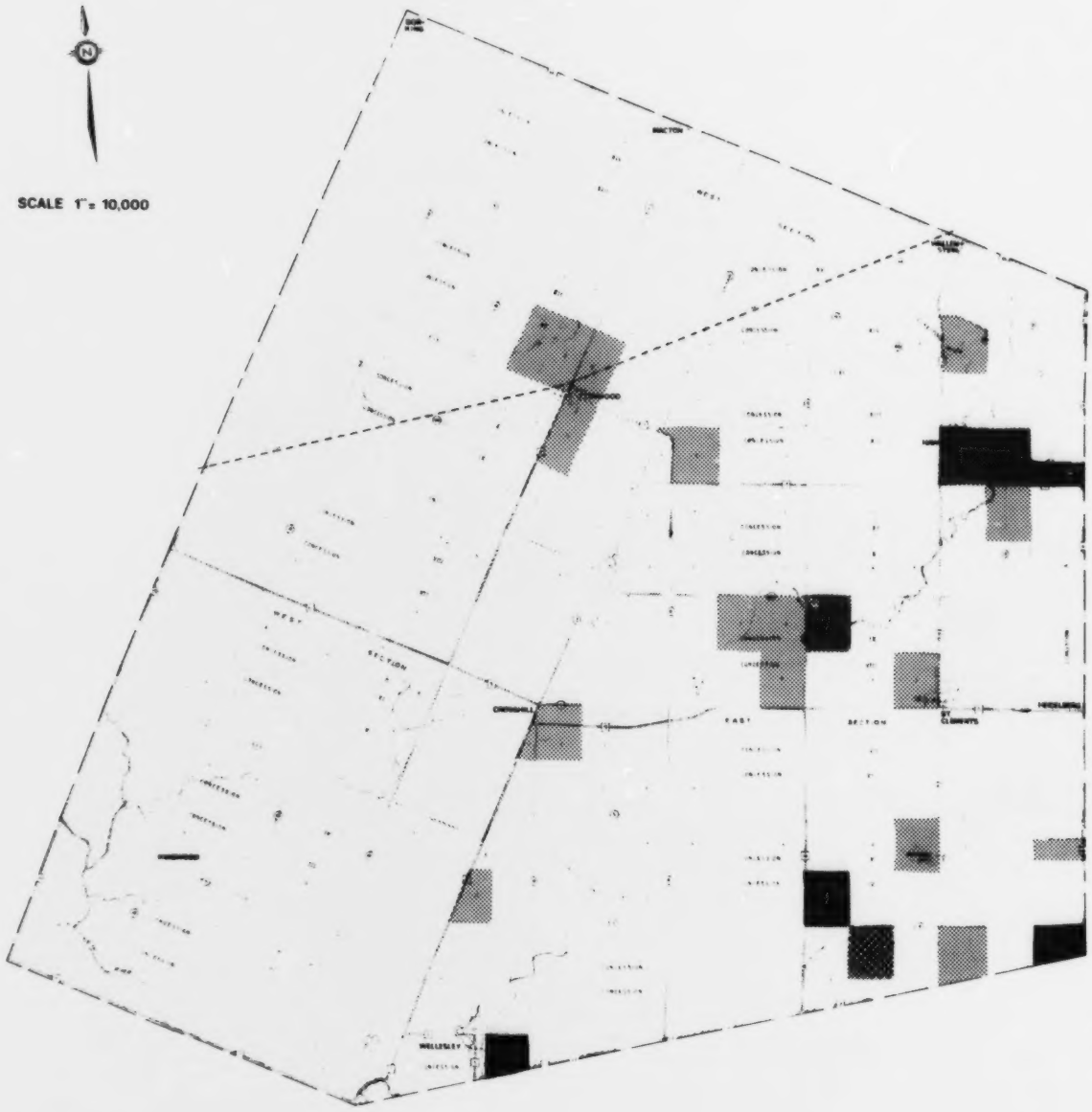
LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF NORTH DUMFRIES

FRAGMENTATION OF RURAL LAND



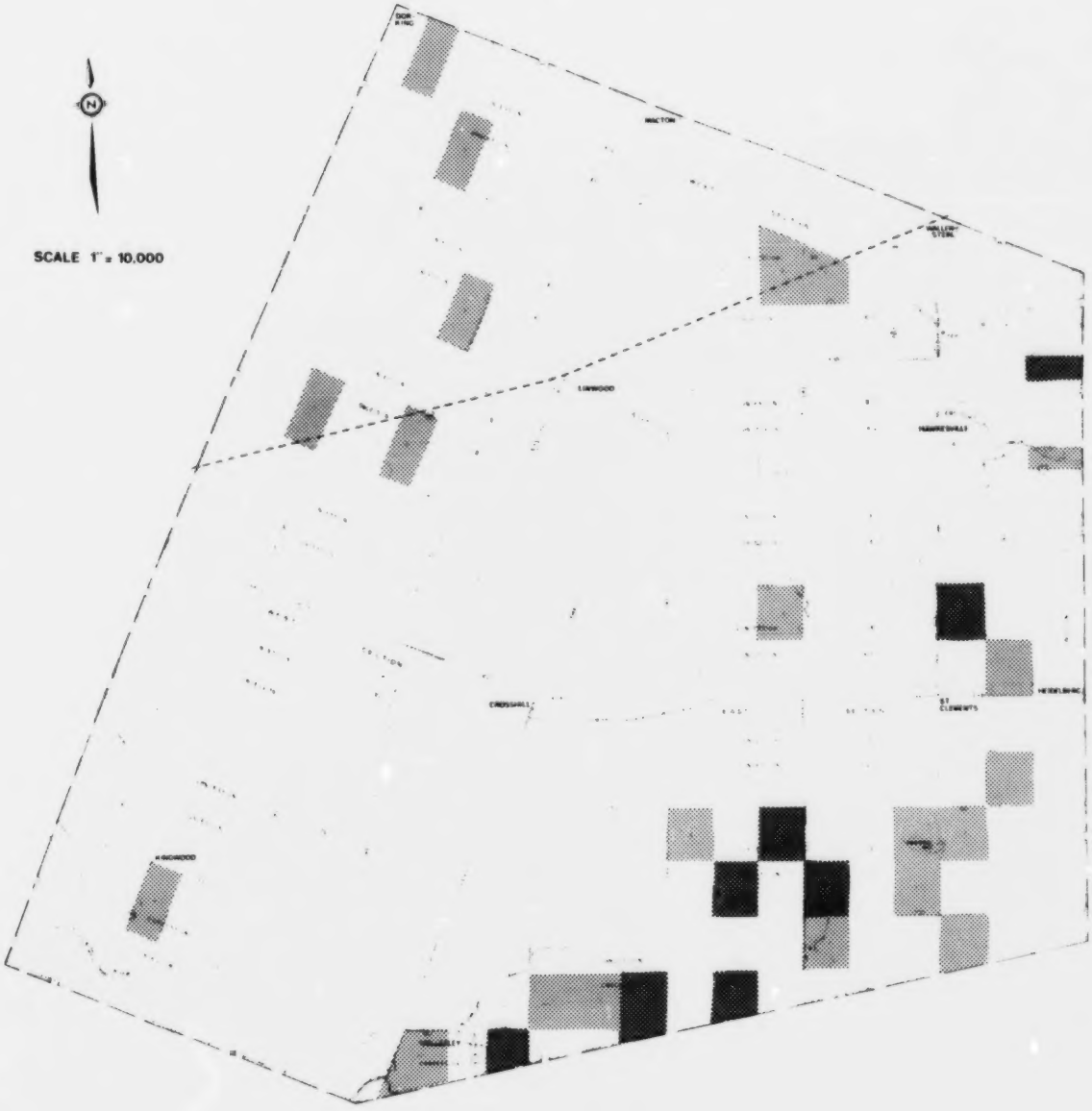
PARCELS 1-5 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WELLESLEY
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

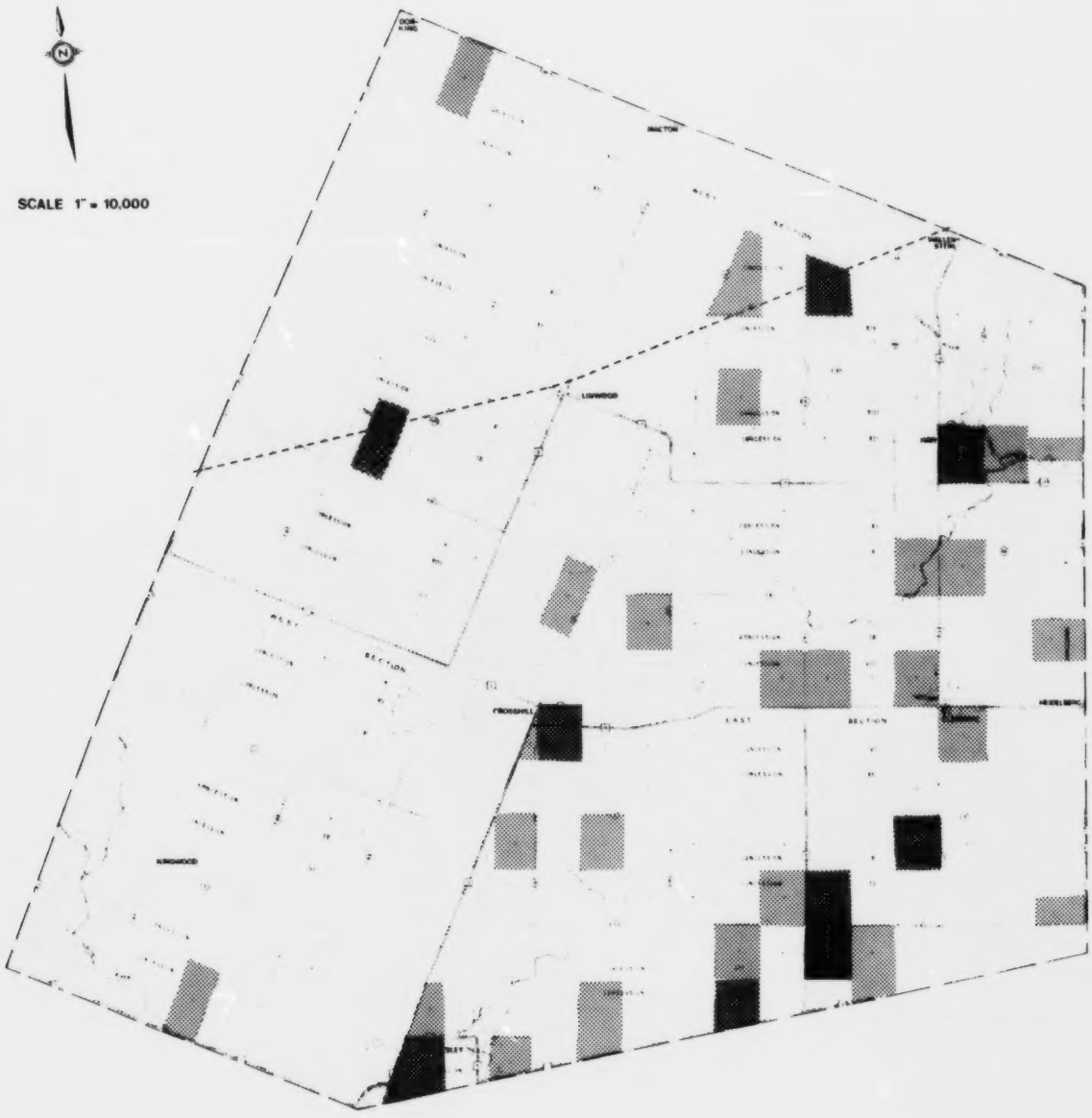
PARCELS 5-10 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WELLESLEY
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

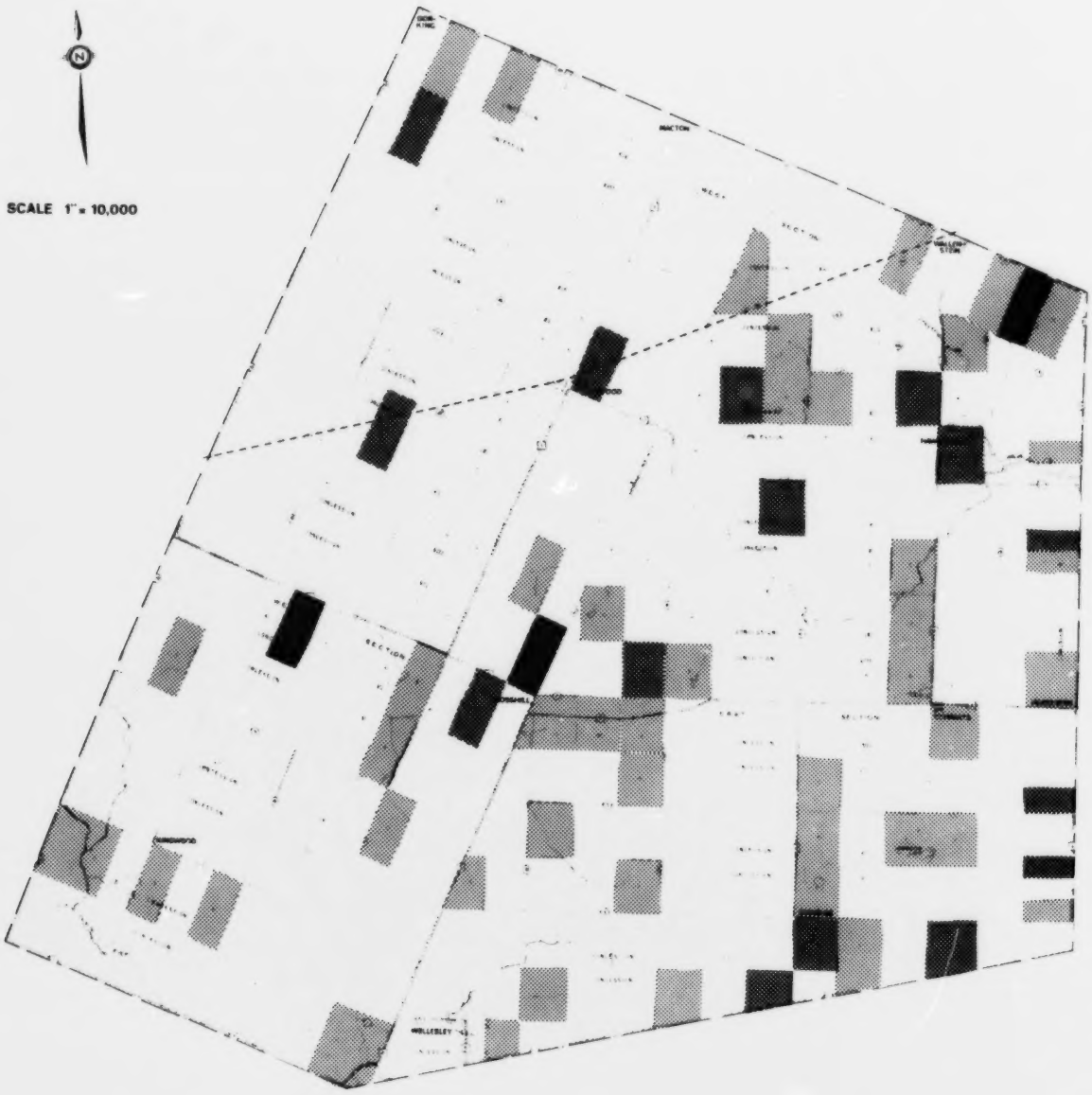
PARCELS 10-25 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WELLESLEY
FRAGMENTATION OF RURAL LAND



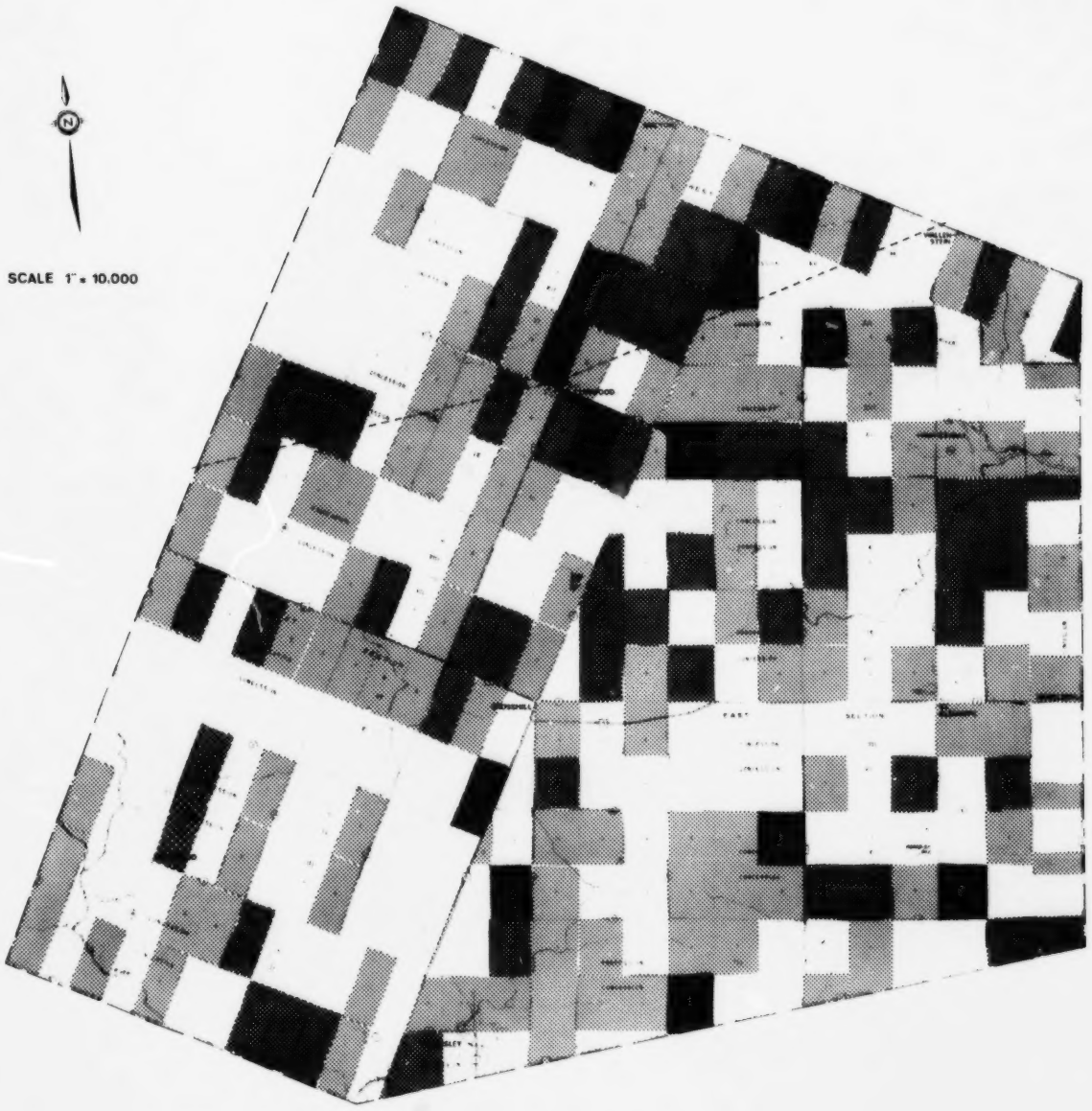
PARCELS 25-50 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WELLESLEY
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

PARCELS 50-100 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WELLESLEY

FRAGMENTATION OF RURAL LAND

SCALE 1" = 10,000

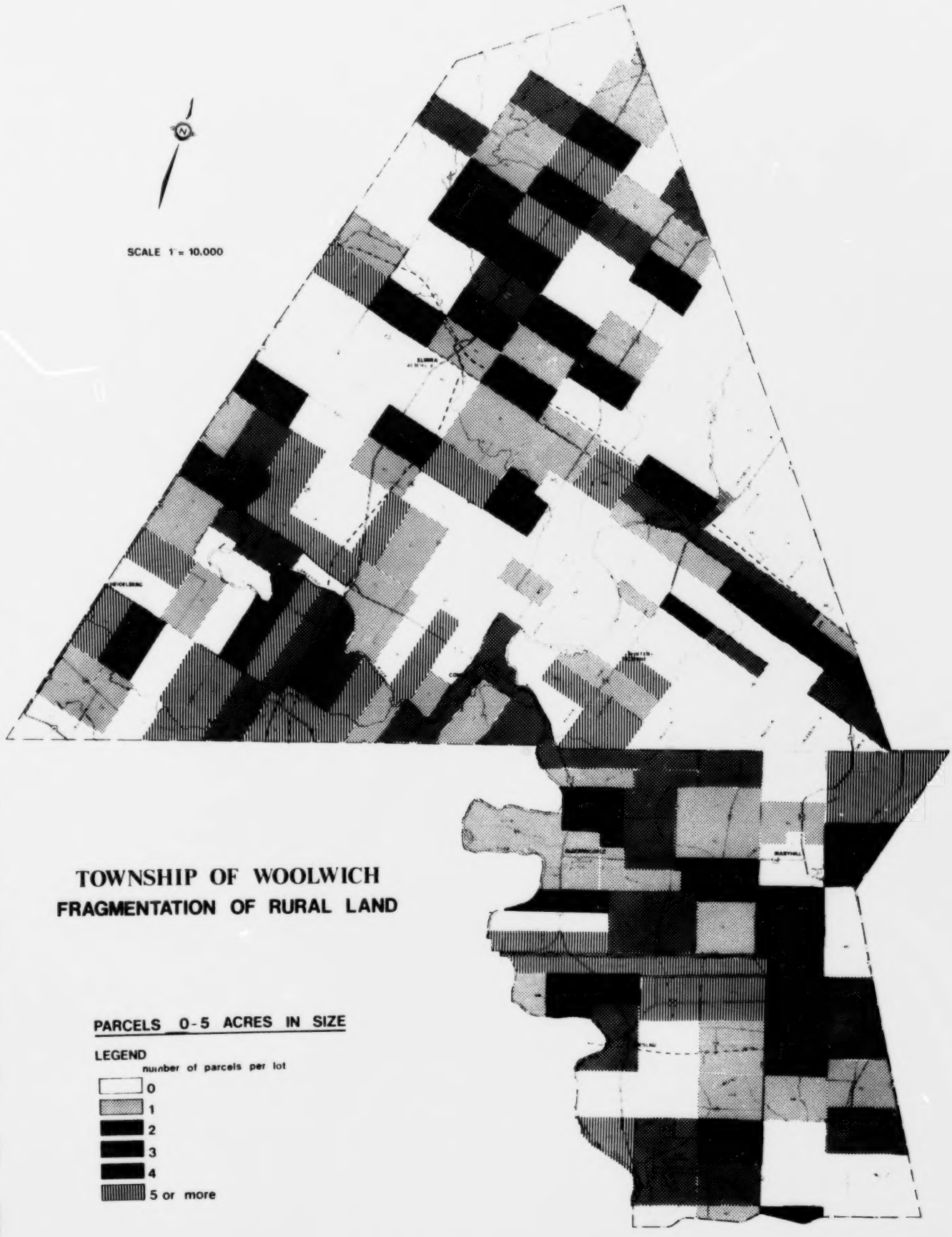
PARCELS 100+ ACRES IN SIZE

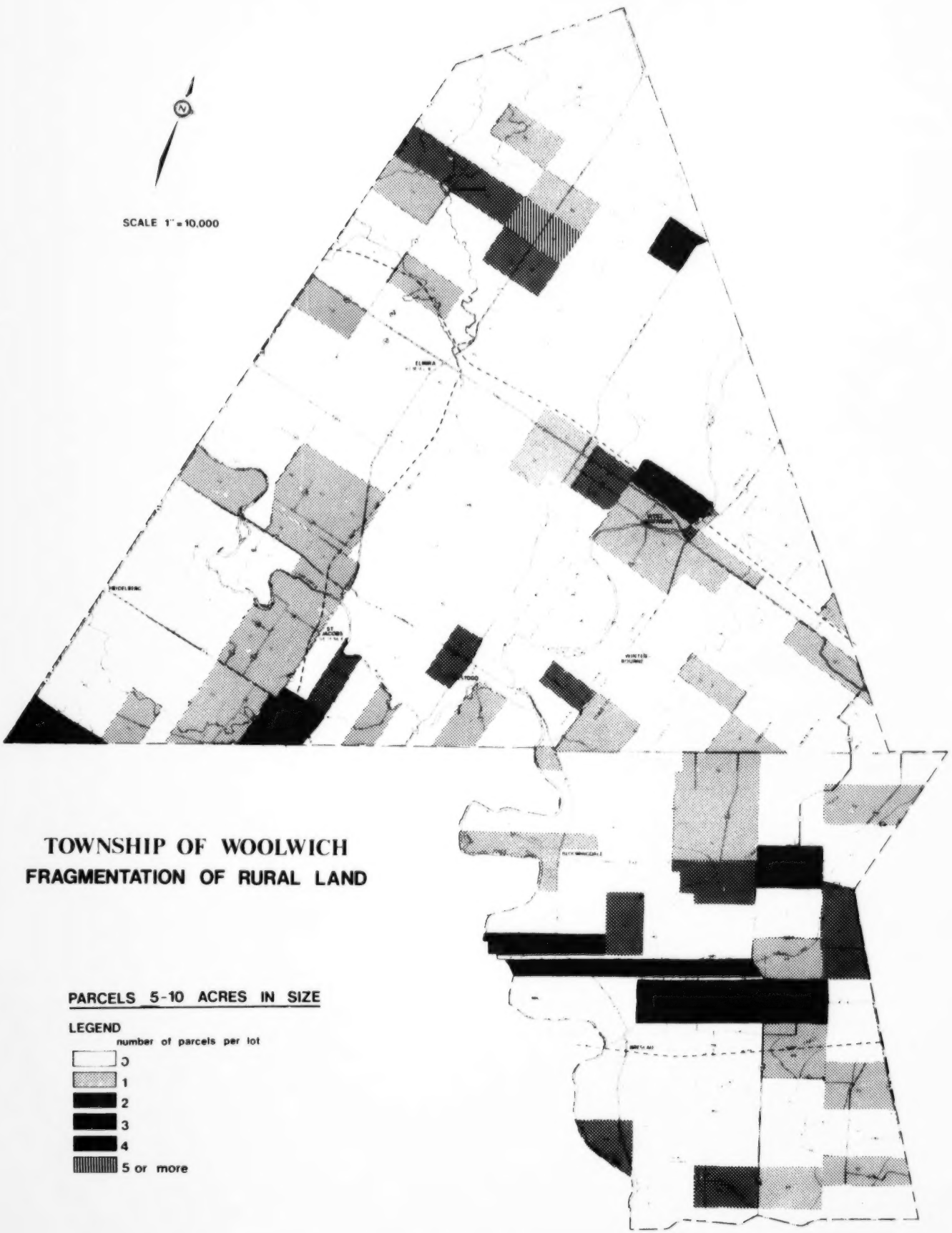
LEGEND

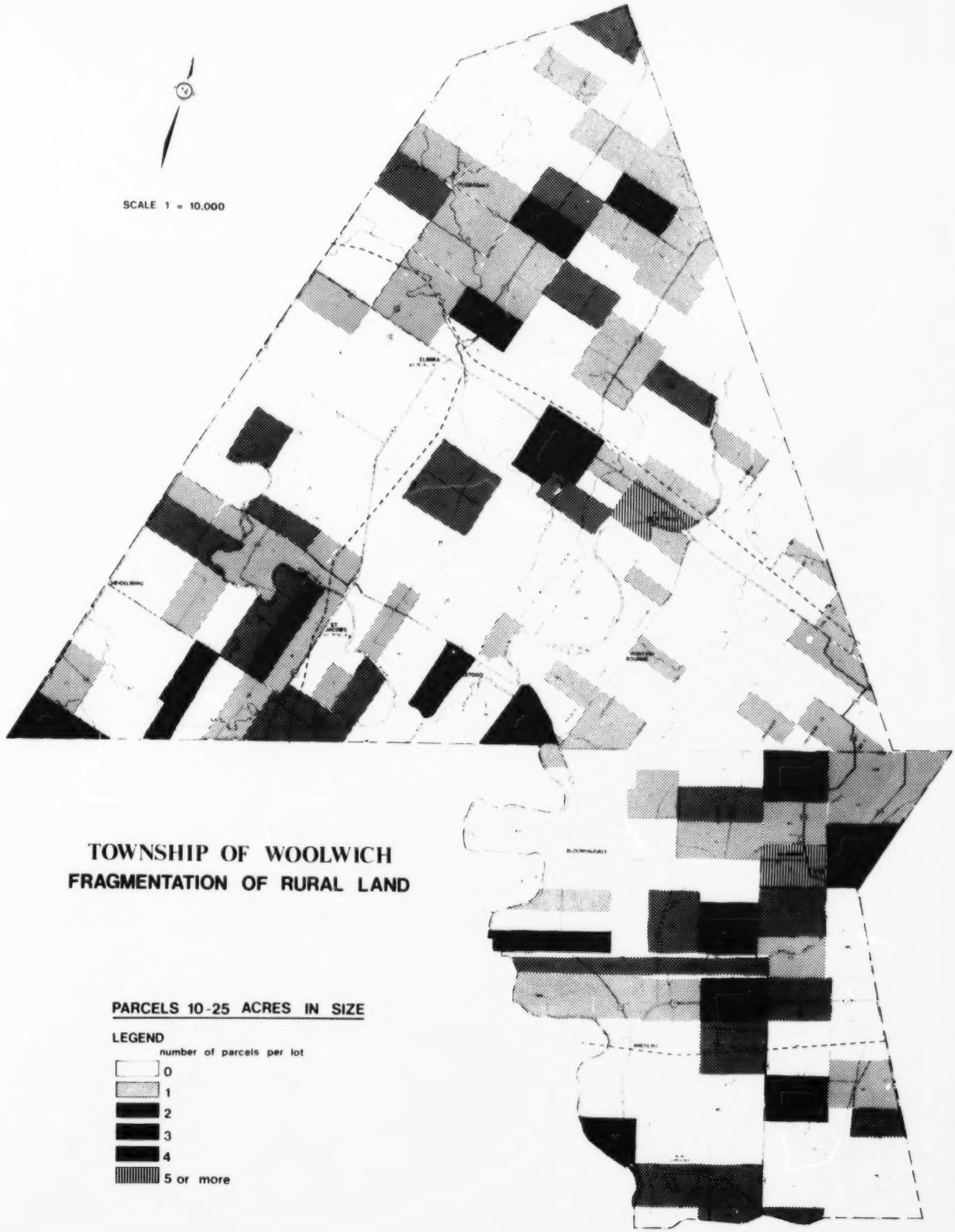
number of parcels per lot

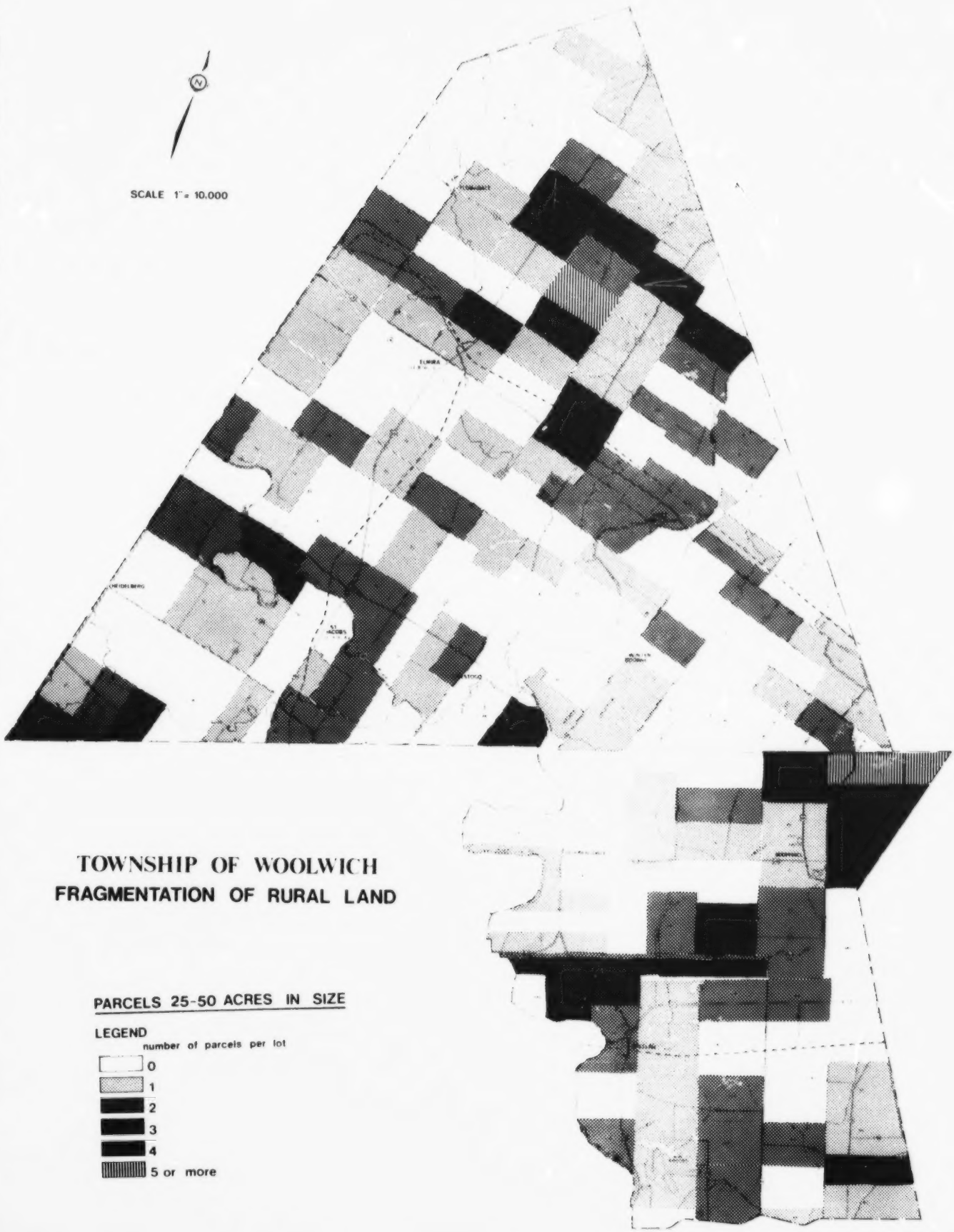
- 0
- 1
- 2
- 3
- 4
- 5 or more

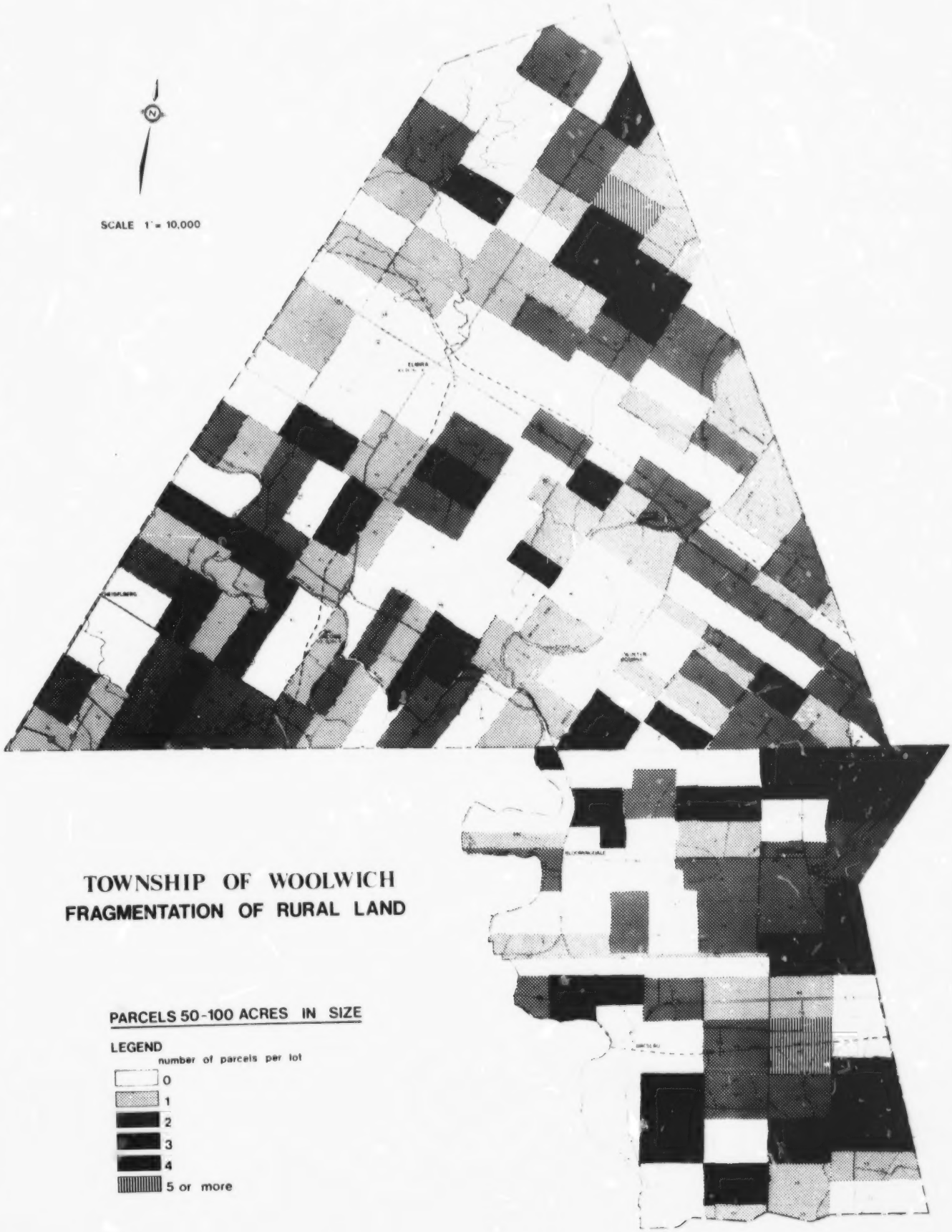
TOWNSHIP OF WELLESLEY
FRAGMENTATION OF RURAL LAND


N
SCALE 1" = 10,000
ELMIRA
HEIDELBERG
WATERLOO
BADEN
NEW HAMBURG
TOWNSHIP OF WOOLWICH
FRAGMENTATION OF RURAL LAND
PARCELS 0-5 ACRES IN SIZE
LEGEND
number of parcels per lot
0
1
2
3
4
5 or more

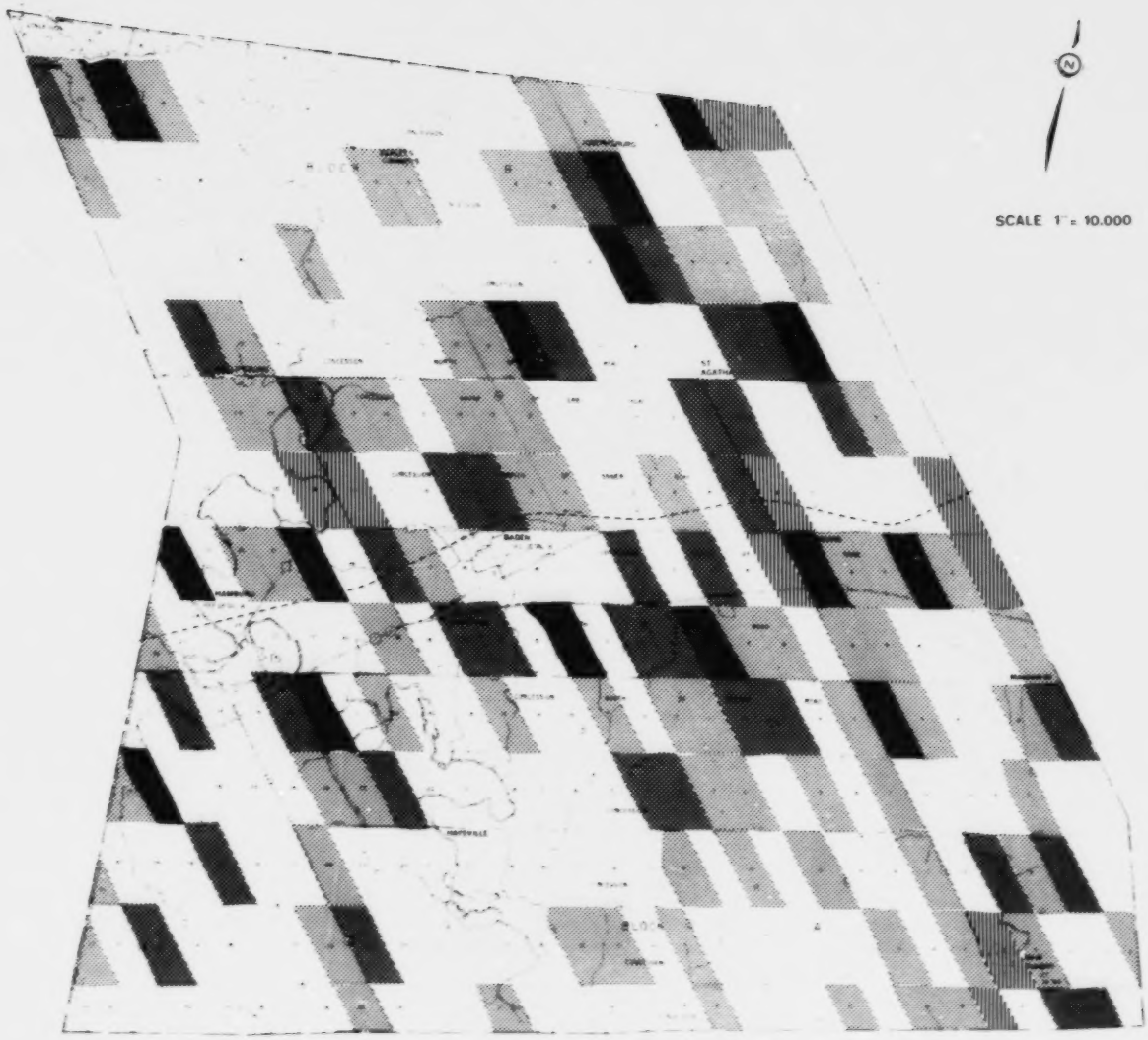

SCALE 1" = 10,000
TOWNSHIP OF WOOLWICH
FRAGMENTATION OF RURAL LAND
PARCELS 5-10 ACRES IN SIZE
LEGEND
number of parcels per lot
0
1
2
3
4
5 or more


SCALE 1 = 10,000
TOWNSHIP OF WOOLWICH
FRAGMENTATION OF RURAL LAND
PARCELS 10-25 ACRES IN SIZE
LEGEND
number of parcels per lot
0
1
2
3
4
5 or more


SCALE 1" = 10,000
N
ELMIRA
TOWNSHIP OF WOOLWICH
FRAGMENTATION OF RURAL LAND
PARCELS 25-50 ACRES IN SIZE
LEGEND
number of parcels per lot
0
1
2
3
4
5 or more


SCALE 1" = 10,000
TOWNSHIP OF WOOLWICH
FRAGMENTATION OF RURAL LAND
PARCELS 50-100 ACRES IN SIZE
LEGEND
number of parcels per lot
0
1
2
3
4
5 or more

SCALE 1" = 10,000
TOWNSHIP OF WOOLWICH
FRAGMENTATION OF RURAL LAND
PARCELS 100+ ACRES IN SIZE
LEGEND
number of parcels per lot
0
1
2
3
4
5 or more



SCALE 1" = 10,000

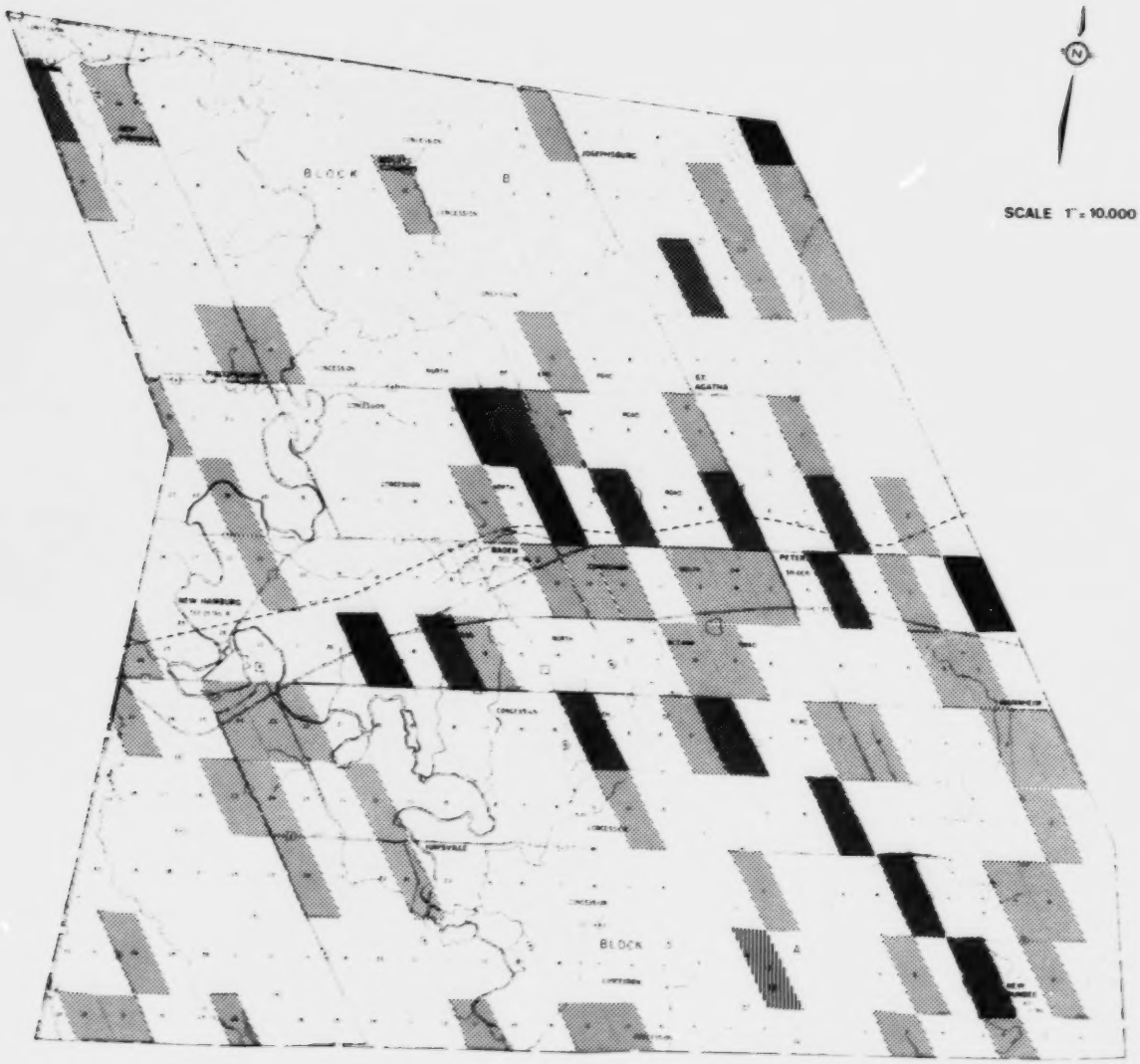
PARCELS 1-5 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WILMOT
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

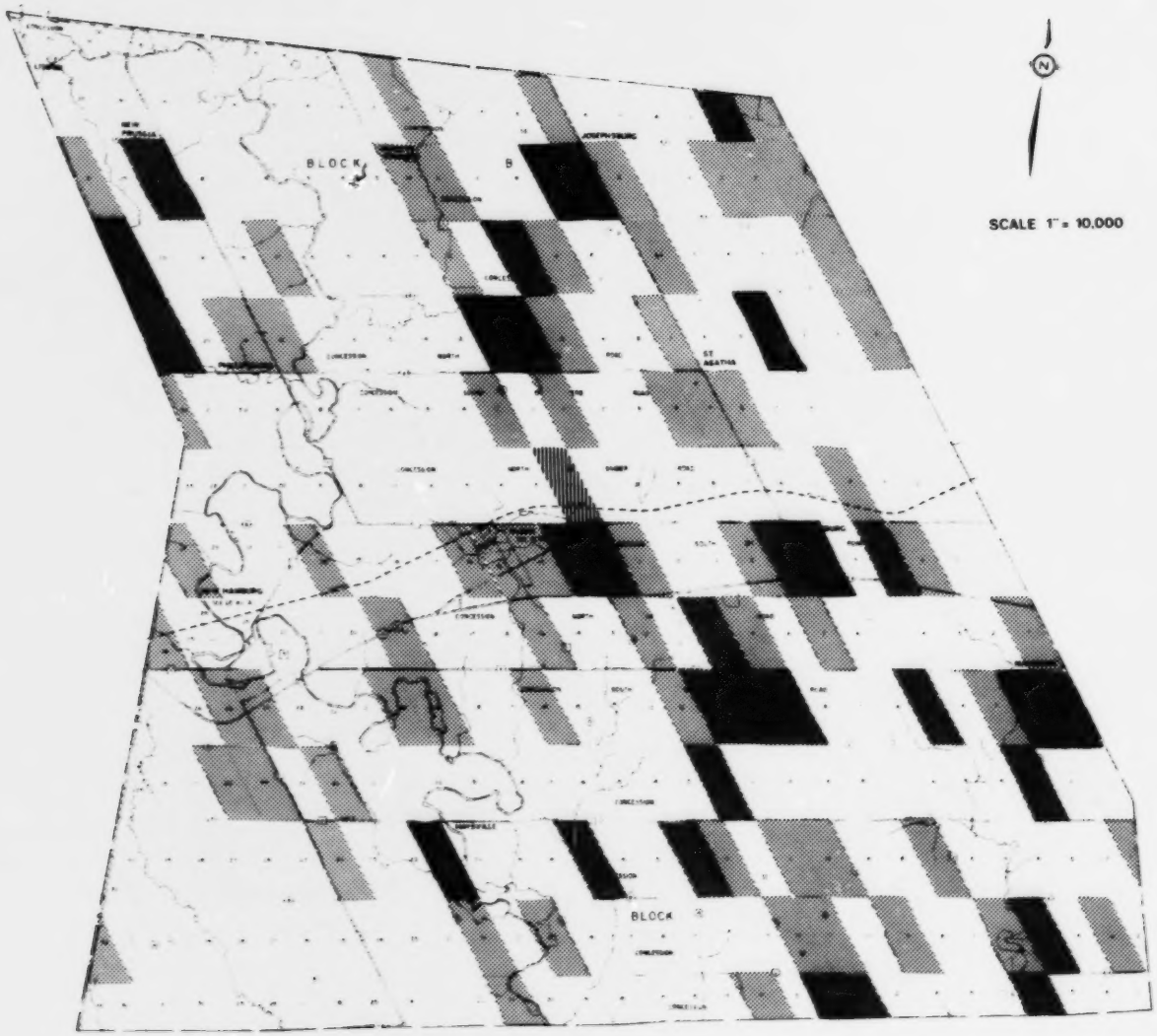
PARCELS 5 - 10 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WILMOT
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

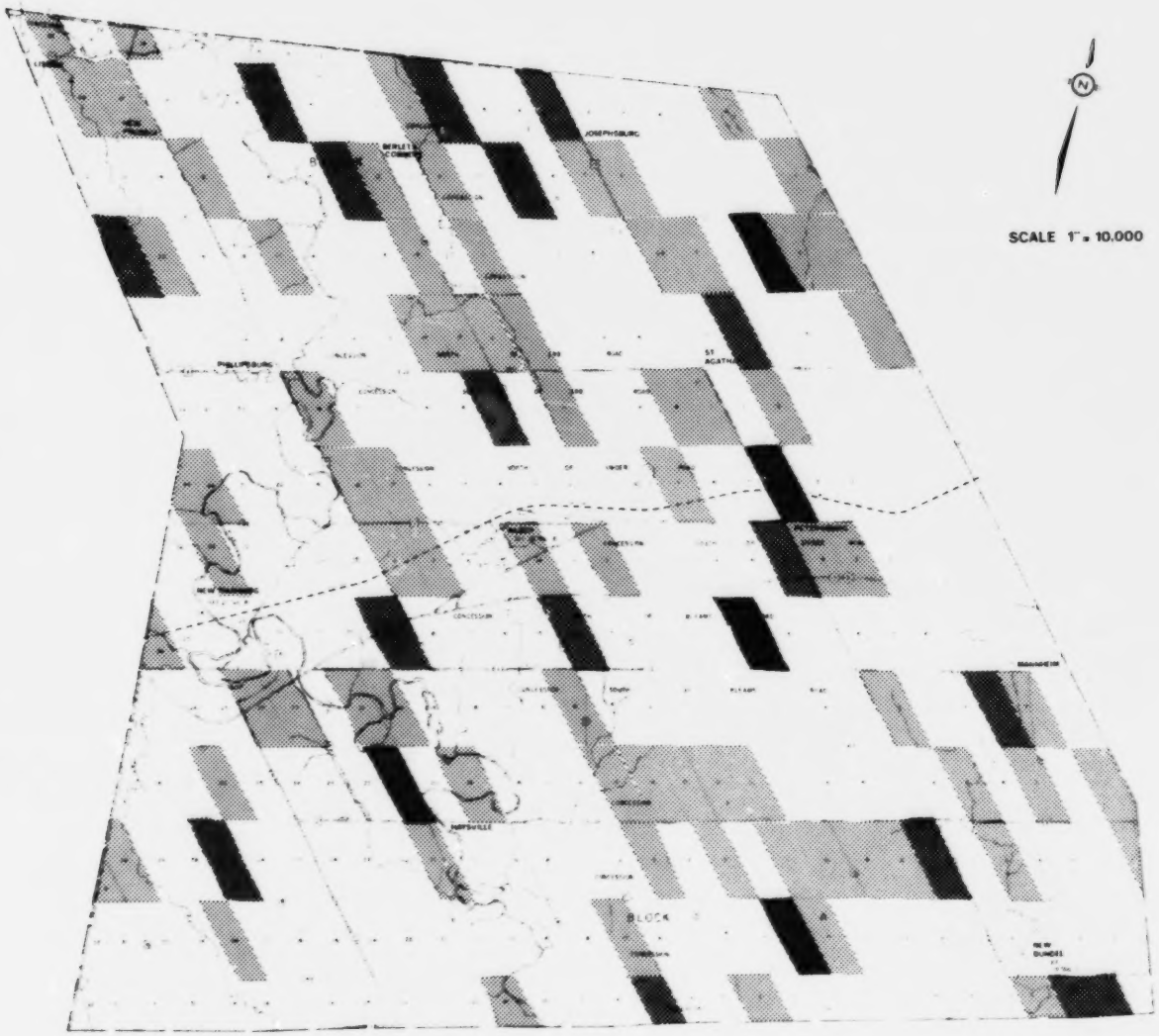
PARCELS 10 - 25 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WILMOT
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

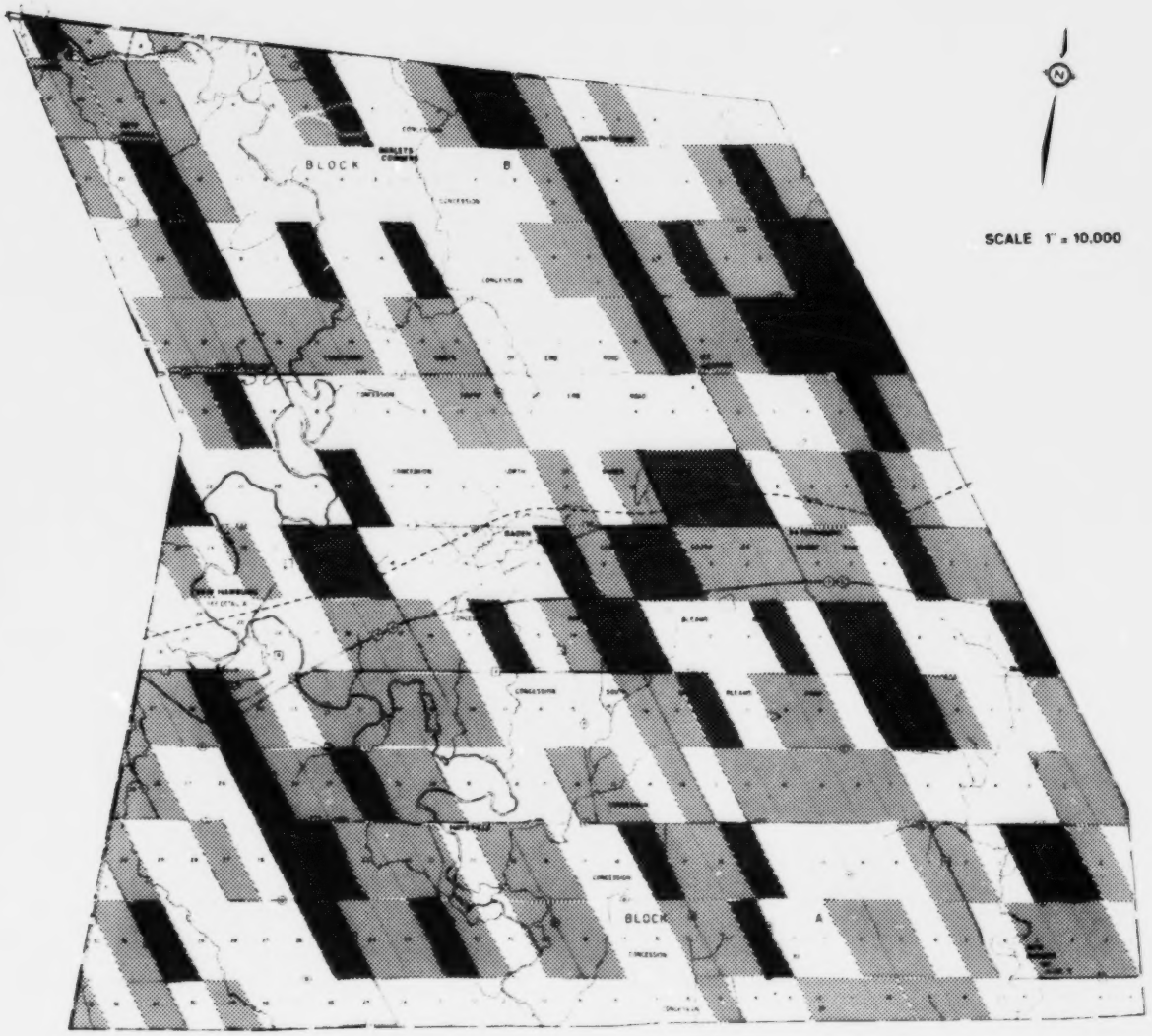
PARCELS 25-50 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WILMOT
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

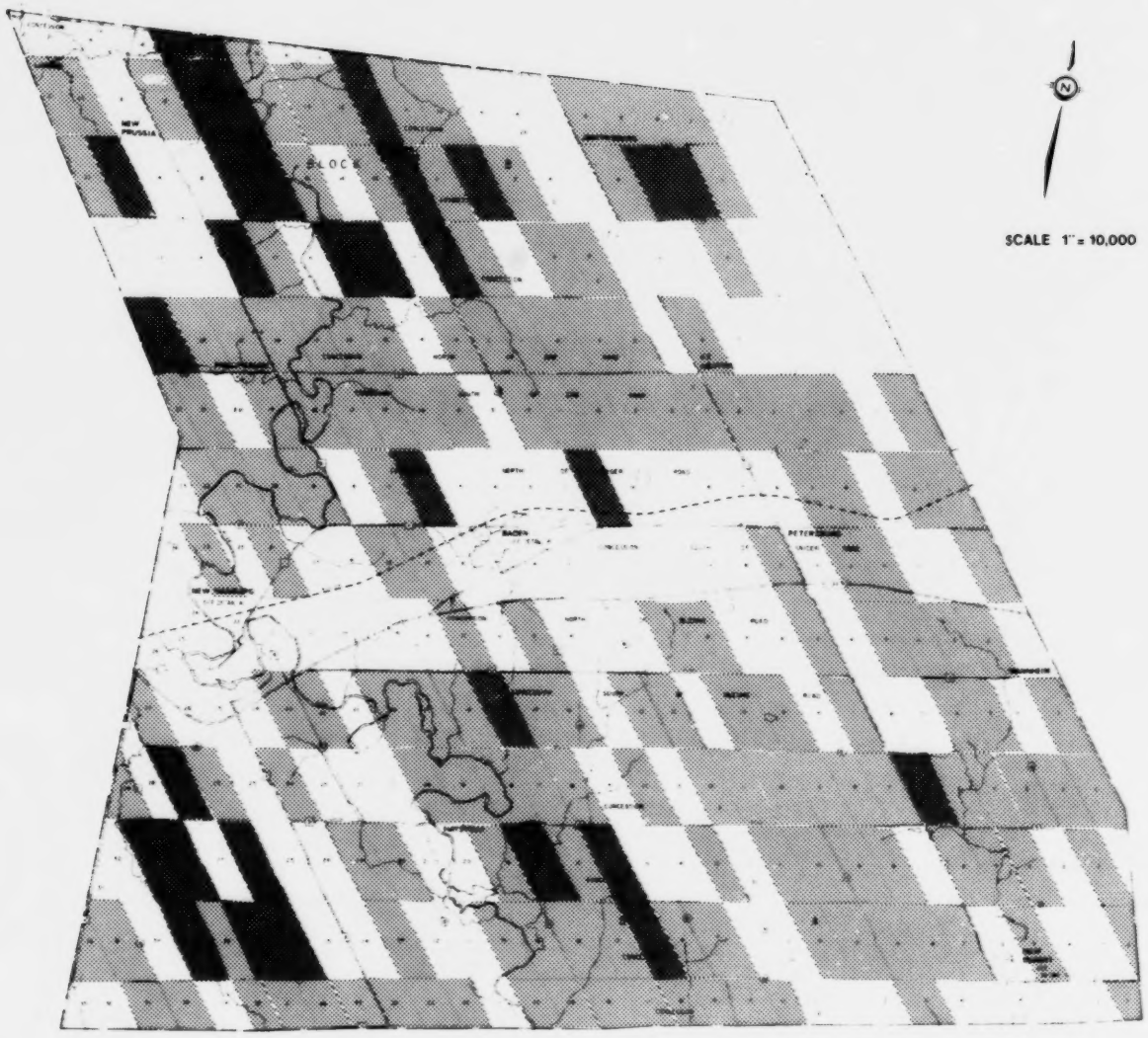
PARCELS 50-100 ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WILMOT
FRAGMENTATION OF RURAL LAND



SCALE 1" = 10,000

PARCELS 100+ ACRES IN SIZE

LEGEND

number of parcels per lot

- 0
- 1
- 2
- 3
- 4
- 5 or more

TOWNSHIP OF WILMOT
FRAGMENTATION OF RURAL LAND